WORKERS MOTIVATION ON NIGERIAN CONSTRUCTION SITES

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BY

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AHMADU BELLO UNIVERSITY School of
Post Graduate Studies Approval
Page

I **certify** that I have read this study and in my opinion, it conforms with acceptable standard of scholarly presentation and is adequate in scope and quality as a project for the Degree of **Master of** Science in Construction Management.

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INSPIRATION

"Be not too presumptuously sure in any business; for things of this world depend on such a train of unseen chances that if it were in man's hand to set the tables, still he would not be certain to win the game".

George Herbert.

To my beloved children

IBILOLA AND ADEBISI

"Thy children shall be like olive shoots around thy table".

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ABSTRACT

The size, complexity and processes of construction projects nowadays have brought with them new problems for construction managers. The need therefore*arises to review factors affecting workers' motivation and productivity on construction sites.

Motivation is an important concept about people and whenever anybody confronts a problem at work dealing with people, he or she is making use of human relations. It is of direct relevance^here-fore, to examine some important concepts about human relations.

The study also explains the organisation structure with reference to roles and status of individuals and goes further to elaborate on leadership and supervision concepts with reference to motivating workers. -$*■ ^Xsm^

The third chapter deals with the existing motivational theories as part of the literature review of this study.

The findings and results of interview with management, foremen tradesmen and labourers are reported in the fourth chapter. .

The general analysis of this chapter revealed that motivation in the construction industry today does not agree with the scientific school of thought which says that workers are idle, lazy and are motivated solely by money. On the contrary, it was found out that work men are highly motivated by the job and its working conditions.

Among the factors influencing the productivity of these work men are

(a) Inability to perform to schedules

(b) Inadequate field support of design team

(c) Re - work

(d) Lack of feedback on achievement

(e) Moving from job to job. stop here

The construction manager will experience better co-operation from his workmen and will move a step further in achieving his company's objective by considering the following recommendations

(a) Provide adequate and standard satisfiers such as pay, medical facilities, leave and leave allowance.

(b) Improve the working conditions of workmen by :-

(1) providing adequate field support of design team

(2) eliminating rework

(3) welcoming suggestions from workers

(4) providing feedback on performance

(5) Decentralizing decision making.

CHAPTER ONE

I N T R O D U C T I O N

1.1 THE STATEMENT OF THE PROBLEM

A lot of research has been done on the motivation of workers but one thing is crystal clear - all the answers are not yet in. The construction industry, like most others, has human beings as a share of its resources in terms of labour. Labour accounts for about forty percent of the costs of a contract and it is the most single important resource problem.

The study of planning and control of other resources such as raw materials and plants will loose much of its value without an adequate understanding of the human aspect of construction.

A conspicous feature of the building industry is the irregular nature of its workload. Although construction *statistics[1] illustrate clear patterns of fluctuations in new orders and output, the statistics disguise the extent to which fluctuations occur within individual construction markets.

The individual contractor is not only faced with the variations in demand in a particular market but also has the problem of securing work through the system of competitive tendering. Often the successful tenderer will be required to start work on site a short time following the signing of the

* For references on quotations see p.9.

contract consequently, the workload of contractors is impredictable and can flunctuate widely over short periods. Such variations can make it difficult for contractors to make the best use of their resources.

One of the problems of the construction industry is its lack of research. The purpose of this study is to investigate and provide a clear understanding of human aspect of resources in terms of its motivational phenomena. Management is said to be the achievement of objectives through people. Accordingly, a primary task of management is to maintain a high level of motivation amongst all those working in the organisation. Motivation is an important concept about people and performance is of much importance to management. This study, therefore, seeks to expand the awareness of human psychology in construction.

In its expansion, the construction industry has reached a stage where each subject matter can be divided into well defined and theoretically meaningful sections and each section be given adequate attention.

Every business enterprise exists to make profit. So also is the construction industry. Towards this end, researchers have gone a long way in breaking down the elements of construction, studying and compiling experimental results to increase profit making in the industry. Productivity has become one of the most overriding concern in the construction industry. It is often looked upon as

the key force to bring jobs, vitality and growth to the industry. Construction managers see it as a means for improving profits, competition and costs. Workers also see it as a means of increasing their compensation benefits. There is no doubt to the fact that many groups and individuals look up to productivity improvements as the key to meeting their expectations. It is therefore of great importance to improve the way of managing the processes of planning and of doing work to experience productivity gain. The determinants of productivity can be broken down into the management of raw materials, plants and labour, while adequate attention is paid to cost and time. In order to eliminate, as far as possible, the problem of cost overrun and time overrun in the industry these resources earlier mentioned have to be given adequate attention. It is widely agreed that the greatest untapped potential for increasing productivity lies in the motivation and management of people in the work situation.

Key questions are possed for the productivity manager. How well are human resources used and maintained? How well are human expectations met? Can management keep up and even lead human expectations? How can we manage productivity with changed employees who have different motivations.

Starting with a formulation of what has been regarded as the problem of productivity, this study aims to set forth some features of the general approach to motivating workers

in the construction industry. It aims to study human relations as practised by construction management, to distinguish job satisfaction from job motivation and also to investigate the major factors that influence motivation and productivity of lower level work force on construction sites.

In addition it aims to study the human needs as presented by status in order to present broad motivational guidelines upon which contractors can base human resource management so as to achieve better performance, and also to develop a strategy for increasing level of motivation in the construction industry.

1.2 MOTIVATION - towards a definition

The concept of motivation is more complex than it sounds it therefore gives rise to lack of clarity in its definition. In any case, an attempt is here made towards a definition of motivation.

Motivation is the expenditure of effort towards achieving an objective the organisation wants accomplished it is an important concept about people "Motivation is the process of initiating and directing behaviour".[2]

"A motive is a restlessness, a lack, a yen a force. Once in the grip of a motive, the organism does something. It most generally does something to reduce the restlessness, to remedy the lack, to alleviate the yen, to instigate the force".[3]

Motivation is a word that wears a halo "It is like

justice, democracy, freedom. Everybody approves of it yet there is little agreement as to what is means".[4]

These definitions appear to have common elements which help in the analysis and understanding of the subject. These are the processes by which human behaviour is energised, directed or chanelled maintained or sustained. Therefore the trend of this study will be concerned with the ways of starting, channelling and maintaining human behaviour in the work situation towards a specific goal as each of these aspects represent an important component in the understanding of human behaviour at work.

1.3 MOTIVATION IN CONSTRUCTION - the present position

Management used by the majority of construction companies, is based on "Taylors theories"[5] of Scientific management which were first published in the early 1900s. Influenced by the writings of "Adam Smith"[6] who saw men's work motivation as simply to stay alive, to feed, clothe and house themselves and their families. Taylor formulated a motivational theory with three elements; in general terms they are:-

1. Assumptions regarding man's role and capabilities.
2. The use of control systems and methods of working based on division of labour.
3. Assumptions about the factors which motivate workmen to higher levels of productivity.

At the time of development of this philosophy, it was possible that there was some justification for these assumptions and methods of working, although they were heavily criticised by some of Taylors' contemporaries. Today however, with the work force more educated, with the existence of the welfare system and more general freedom for the individual, there is some doubt as to whether these assumptions and methods of operation are still valid. Many industries have long since discarded these philosophies, but building industry, with its generally conservative nature, mainly craft-based management structure and difficult operating conditions is assumed to have maintained them in a virtually untouched state.

1.4 APPLICATION OF SCIENTIFIC MANAGEMENT IN CONSTRUCTION

To summarise, the main assumptions of beliefs of scientific management school are:

1. Workers are typically lazy, often dishonest, aimless, dull and most of all mercenary.
2. The only way to make men work harder is to introduce a financial incentive scheme.
3. Any initiative must be taken for the workman, and the work planned for him.
4. Success is measured by how quickly and how cheaply the job is done or how many men can be discarded as productivity rises.

5. The workman should realise that he is secondary to the work.
6. All work tasks can be evaluated on a scientific basis and accurate targets set.

The use of scientific management techniques in construction is evident in the process of pre-tender planning, contract planning, materials scheduling, resource levelling, work study techniques and their local extention into critical path method of project planning and control. "There is without doubt, a financial saving associated with these control systems. Critical Path Method alone has been credited with saving up to 25% of the previous normal time taken for the contract, while people with experience confidently state that a 5% to 15% of total job cost reduction is a conservative estimate for the magnitude of the savings involved with scientific management".[7]

In construction environment ot today, the question is whether it is still reasonable to assume that workmen have little to contribute, lack initiative, are secondary to the work and are motivated solely by money. It is with this in mind that the interview in this study is conducted to verify the truth about motivational situation of construction workers.

1.5 METHODOLOGY

This study purposes to formulate, within a general systematic framework, specific and empirically meaningful questions about motivational activities and attempts to answer them in the light of available investigation evidence. The evidence is the result of the interview with selected construction companies and the discussion is conducted at a level of generality that would make it applicable likewise to other construction workers. An attempt is made to describe and interprete motivational phenomena in terms of the same concept, principle and processes that are employed in construction.

The results of the interview is analysed and conclusion drawn upon which recommendations can be made by which construction workers can be motivated towards better productivity.

1.6 SCOPE AND LIMITATIONS

This study intends to limit itself to the study of human labour as a resource in construction, the human relations as practised by construction management, the existing motivational theories and motivation as practised in the construction companies.

It should be noted here however, that the study is limited to the investigation of factors influencing the motivation and productivity of the foreman and of lower level work force on construction sites.

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CHAPTER TWO

WORKING CONDITIONS AND INDIVIDUALS

Motivation has been mentioned to be an important concept about people. Our study of human beings will therefore incorporate some basic concepts about human relation.

An understanding of human relations obviously indicates an understanding of individuals.

This part of the study defines what human relation is and it gives examples of the practise of human relations. It covers some key aspects of human behaviour that are likely to manifest themselves on the job. It goes further to throw some light on job performance, job satisfaction and their link with motivation and also points out some facts about the links and differences between job satisfaction and job motivation. It also views the organisation structure with relevance to leadership and supervision.

2.1 HUMAN RELATIONS

Anytime anybody confronts a problem at work dealing with people, either individually or in groups, he is making use of human relations. Human relation then can be defined as the practice of using systematic knowledge about human behaviour to achieve organizational objectives!* "Human relations is motivating people in groups to develop teamwork which effectively fulfills their needs and achieve

* For references see p.54.

organizational objectives".[1]

Case I

At the beginning of a new year, a foreman named Waldo walked into the head office of K-Construct Construction Company. With a dismayed look on his face, he exclaimed;

Mr. David, I'm packing my bags and leaving for home today. I can't take another day of this job. As a foreman I don't even feel like a human being. The Supervisors are ordering me around on the sites. When I go to the head office I get flak from the project manager. I feel like a rubber band being stretched from both ends, and I'm about to snap.

Mr. David said "But Waldo, you can't walk out now. It's the beginning of a new financial year and new projects are at hand. Leave me now and you'll never get another job as a foreman again. Are you staying or not? Waldo replied, "Insult me all you want, but my sanity is more important than my job as a foreman".

Case II

A construction manager, back from a seminar in job motivation decided to better motivate his foremen by enriching their jobs. His decision was to give his foremen the opportunity to visit completed projects to see how their clients were actually making use of their products. Tony, the manager first approached Bermer - one of the foreman with his new plan of job enrichment.

"Bermer, I've decided that your job has a couple of missing links. You could use a better understanding of

how your job fits into the total picture. Towards this end, I'm authorising a trip a month to visit clients installations.

Bermer thought over in his mind for a minute the idea proposed by Tony and then reacted; "Tony, that sounds to me as if my job would be even more complicated. As it is, I have more work to do than I can possibly handle. You could do me a favour by giving me less work to do not more".

The managers involved in the above interchanges were both encountering human relations problems. So were their subordinates. David was insensitive to the pressure as perceived by Waldo, he was doing a poor job of managing stress. Tony was trying out a widely used technique of job motivation - that is job enrichment, without tailoring it to the individual situation of a given subordinate. This study is only closely related to psychology and not a general study of human beings, it is therefore unnecessary to provide here a conception of what people are like; yet, a few anchor points are necessary. To deal effectively with individuals or small groups in a job environment, one needs a basic framework for understanding human beings.

2.1.2 THE BEHAVIOURAL MODEL OF HUMAN BEINGS

The behavioural model of human beings is presented below. The model can be brought to life by applying it

to a case history of a young man who tackled a challenging assignment.

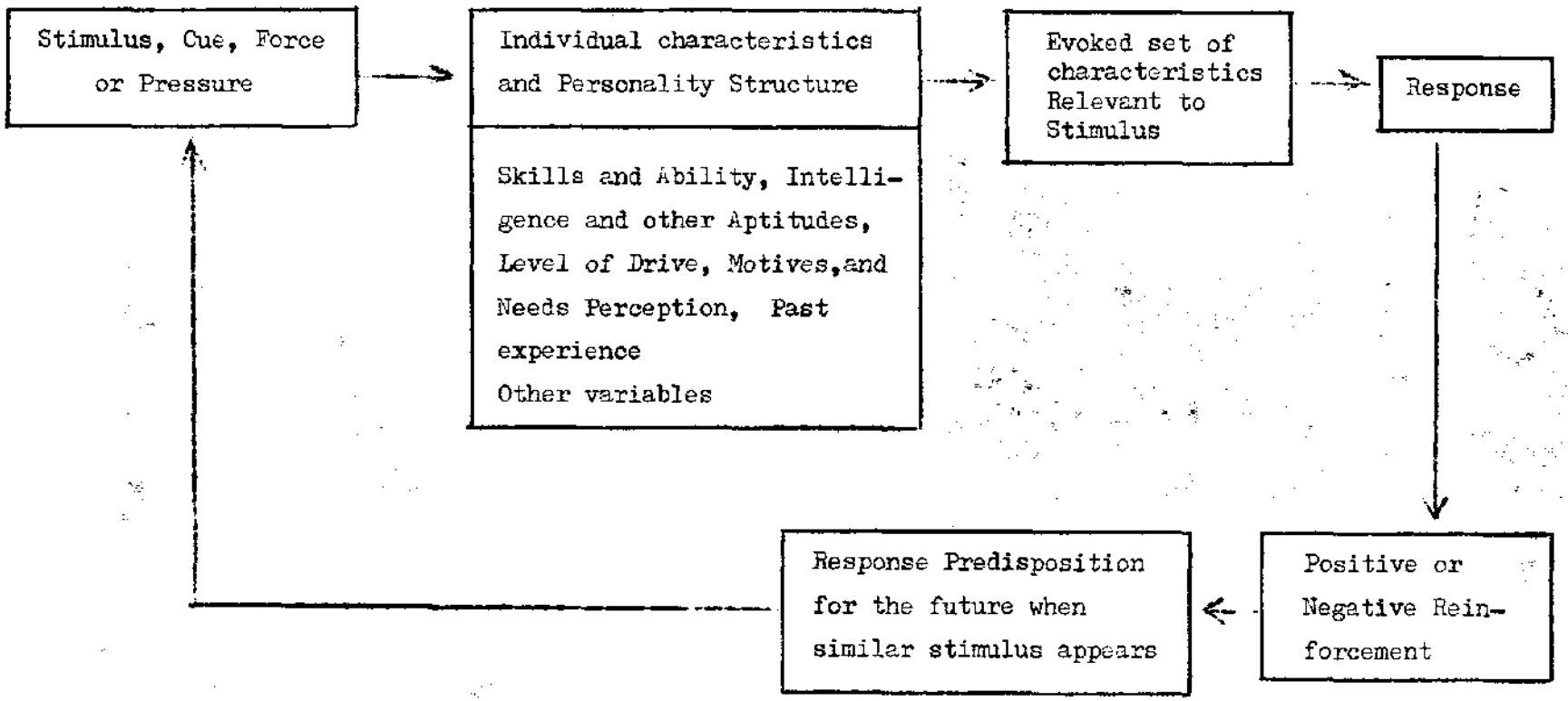
(a) Stimulus, Cue, Force or Pressure - Tom received a phone call from a stranger, offering him this proposition. "Hello this is Mr. Orbaker. A friend of yours referred you to me. I have an old building that has been messed up pretty badly by the two families who have been living there. Both families have left and the place is in shambles. Would you be interested in patching the place for me so it's suitable for people to live in?

Tom responded "I've never tackled anything that big before on my own. Right now I'm doing some free-lance work for other contractors. But I'll like to meet with you and inspect what has to be done." "Okay" replied Orbaker, "Let's you and I meet next Thursday evening at 6 p.m."

Tom had thus received a stimulus (or even pressure) from the environment. He had been invited to become an independent contractor for refurbishing a two-family building.

(b) Individual Characteristics and Personality Structure

The manner in which Tom responds to this stimulus from the environment depends upon many things about him as a person. Each stimulus, or environmental



BEHAVIOURAL MODEL OF HUMAN BEINGS

Source - See (2) pg. 54.

force, brings forth different aspects of our personal make up.

For instance Tom's past experiences will contribute selectively to Tom's acceptance or rejection of this assignment and to how he performs. Many aspects of his past experience will be called to mind by the stimulus of the contracting job, but certainly not every aspect. Tom's past history of success and failure in handling independent work will influence his decision. So will his past history in relating to an authority figure like Orbaker. If Orbaker reminds him of an unfriendly high school teacher, Tom may hold back just a little in entering into a business relationship with him. Tom or anybody else may not be consciously aware of the profound influence of past experience on present decisions. Thus they act as an automatic, semi-conscious influence.

(c) Evoked Set of Characteristics Relevant to Stimulus

As Tom inspects the building with Mr. Orbaker, many elements of his personal make-up come into play. For example, his level of drive toward accomplishing worthwhile tasks is higher than average. His decision such as "Yes, I'll tackle this assignment if we can agree on a satisfactory price".

Before Tom could proceed to tackle an assignment, other aspects of his functioning were evoked. His intelligence and numerical ability were crucial. If Tom provided too high an estimate, Orbaker might take his business to a licensed contractor. If Tom estimated low, he might find himself working at a price so low that he would not be able to cover his living expenses.

Many of Tom's needs and motives were also evoked by Orbakers proposition. A need is a deficit within an individual such as craving for water or recognition.

A motive is a need or desire coupled with the intention to attain an appropriate goal. Tom has a strong need to be independent, and his motive for taking on such an assignment might be to experiment with self-employment.

(d) Response:- Tom did say 'Yes' to the offer. He contacted his close friend Peter to work with him on the assignment. Tom and Peter worked diligently for twelve days with a three-day rest in the middle for camping. In Orbaker's opinion and their own, Tom, accompanied by Peter, performed admirably well.

(e) Positive or Negative Reinforcement

In this situation, Tom and Peter received almost all positive reinforcement. Performing the job well

was a reward in itself; it helped to strengthen the self-confidence in both men. A reward is anything that acts as a positive reinforcer.

(f) Response Predisposition for the Future

As a consequence for the substantial positive reinforcement received by Tom, he is now predisposed to bid on any construction or renovation contracts that might come his way.

(g) Where human relation fits in

Orbaker used systematic knowledge about human behaviour to achieve his objectives and human relations was practised. Orbaker did rely on systematic knowledge about people in a variety of ways to achieve his objectives.

Orbaker chose the right leadership approach to handle Tom and Peter. Seeing that they were responsible, mature young adults, he gave them considerable freedom to do the job as they saw fit. He provided them with general guideline of what he wanted done but allowed them to choose the method.

Orbaker recognized that Tom and Peter were in need of money. His response was to make ₦275 payment as they completed each quarter of the project. He provided Tom and Peter with large quantities of praise and reassurance. Like "you fellows are doing a terrific job. You're saving me from going down the

tubes with this building. Keep up the good work and you'll see a lot more work from me in future".

Tom and Peter practised good human relations by reinforcing Orbaker's faith in them. They ordered only those supplies needed to accomplish their job. Working together as employer and employees, Orbaker, Tom and Peter created an organizational climate of trust and openness - a very helpful condition in achieving both organizational and personal objectives.

2.1.3 HUMAN RELATIONS AND BEHAVIOURAL SCIENCE

Human relations is a field and skill that gathers much of its systematic knowledge from the social and behavioural science. Classification schemes differ, but the social sciences are now generally considered to be economics, history, and political science. Behavioural sciences are primarily anthropology, sociology, and psychology. If someone were to trace the sources of most scientific studies underguiding human relations principles, he or she would discover that psychologists and sociologists are the largest contributors. More specifically, most of the body of knowledge now called human relations stems from the findings and observations of industrial and organizational psychologists.

Personnel administration is a hybrid field similar in scope to human relations. Personnel administration differs from human relations primarily because it is concerned with

the application of personnel research. A person who practices personnel administration must use human relations, but also be conversant with personnel testing, wage and salary administration, and attitude surveys, among numerous techniques.

2.1.4 HOW RESEARCH HELPS HUMAN RELATIONS

An example of the relationship between human relations and science is found in a study about improving job performance through training in goal setting published in the Journal of Applied Psychology. Conducted by Gary P. Latham and Sydney B. Kinne III, this study is considered relevant because many practitioners of human relations believe that goal setting is a vital ingredient of good supervision. Reliable information about goal setting in a work environment would thus help the practitioner of management and the human relations specialist make more sound pronouncements about goal setting.

The researchers wanted to determine the effects of a one-day training program on the job performance of pulpwood workers. Criteria used for measuring the effectiveness of the program were cords-per-sawhand hour and cords-per-crew hour of production. Additional criteria included measures of turnover, absenteeism, and injuries, all indirect indexes of worker job satisfaction or dissatisfaction.

Twenty-six producers and their crews were selected and matched on such considerations as past production records.

One crew from each pair was randomly assigned to the training group. The remaining participants in the study were used as a comparison group, a crucial requirement of a scientific study.

Seven experienced company foresters were given instruction in training. A three-hour programme was conducted that carefully explained the purpose of the experiment and its underlying assumptions. An intensive discussion program period was held after the program.

Each of the seven foresters contacted the selected producers and requested their participation in the study. Each producer was told that they would be participating in a research program of three-month duration, but that they could leave at any time. However, the experimental groups (those who received training) were given slightly different instructions than the control group (no training).

The experimental subjects were told that the purpose of the study was to give them a one-day training programme in learning to set production goals and to determine its effects on performance - the absolute truth. The control subjects were told that the study was designed to determine the effects of injuries, absenteeism, and turnover on production - a deceptive statement considered necessary for the sake of science!

Training in goal setting was based on the premise that increasing the performance of the sawhand results in an increase in the productivity of the crew. This premise was based on

the fact that the felling of a tree is vital to achieving the remaining tasks in pulpwood harvesting.

By means of complicated statistical analysis, production tables were constructed to systematically establish production goals. These tables allowed for factors that could effect production owing to differences in harvesting stand conditions.

A production goal in trees-per-sawhand hour was determined for each day and week. This goal was stressed as a minimum standard of acceptable performance. However, no penalties were established for failure to reach the goal. Producers in the control group (and their sawyers) were not informed of the goal established for the experimental groups.

Production levels were measured by means of tally meters assigned to sawyers in the experimental groups - the people who actually cut down the trees. Producers in both groups were given a form to record production, turnover, absenteeism, and injuries. Producers in the experimental group had an item on their form requesting information concerning the production goal.

The difference in production between the group of sawyers who received training in goal setting was slightly higher than the production of the control group. A more striking difference was found between the performance of the crews trained in goal setting and the nontrained groups. A third important result of the study was that absenteeism was significantly higher in the control group than in the experimental group.

Implications for Human Relations. Experimenters Latham and Kinne concluded that training in goal setting can lead to an increase in production and a decrease in absenteeism (at least for a very well-defined type of job). A manager can now more confidently devote ample amounts of time to setting specific production goals for people. Of equal significance, this experiment provides new support for the widespread belief that people perform better when they keep a tally on how well they are going (i.e. receive feedback on their performance). You as an individual might be able to produce more and find your job more interesting if you keep accurate records of your own performance.

2.1.5 HUMAN RELATIONS AND COMMON SENSE

Introduction. A minority of people are highly effective in dealing with other people either on the job or in personal life. Aside from those are individuals who intuitively know how to cope with a variety of people in an effective manner, most people are plagued with interpersonal problems. Virtually all organizations have many problems involving people. Thus, if common sense (meaning natural wisdom, not requiring formal knowledge) were widely held, there would be fewer problems involving people.

A site engineer complained angrily, "Why did my company send me to this workshop on human relations? Anybody with half a mind knows how to be nice to people. Don't they know that human relations is just common sense?"

This site engineer's first charge can be dismissed quite readily. Human relations sometimes involves "being nice to people, but more importantly it involves dealing with people in such a manner that individual and organizational goals are fostered.

Since few people have such common sense in matters dealing with people, human relations training is necessary to help improve upon the chaos found in some organizations. Human relations training for personal life might help reduce the number of people chronically dissatisfied with their spouses, children, and themselves. Our present concern, however, is job-oriented behaviour.

Common Sense Requires Experience. Louis, a project manager with three months of experience, reported to his boss, Barney, that he was having vexing problems with two engineers in his office: "They spend so much time in my office complaining about each other that it is difficult for me to take care of my other work. Besides, they are wasting precious time. I've about given up on the problem. Do you have any suggestions?"

Barney instructed Louis to bring the two combatants together in his office (Louis's) and hold a three-way discussion about the problem. Barney also urged Louis to make sure that each engineer clearly laid out the nature of his complaint to the other one.

Louis returned to Barney's office one week later with this comment: "Your approach worked like a charm. They shook hands after the conference and I haven't had a complaint from either of them in days. How did you figure that one out?"

Barney replied, "It's just a matter of common sense."

True, Barney has learned how to resolve conflict through trial and error and now has common sense about such problems. By happenstance, he passed on some of his wisdom to Louis. If Louis had supervised people long enough, he too would probably learn good techniques of resolving office conflicts. A more efficient approach would be to read a reliable source about conflict resolution before the problem occurred. Reading about human relations (or any subject) is an economical way of gaining experience. Study an applied subject and you will capitalize upon the experience - and common sense - of others who have been there first.

From a human relations point of view, job-motivation theory tells us that a good job is one that meets our particular needs at the time. Job satisfaction stems from contentment with the nature of the work we are doing.

2.1.6 THE HUMAN RELATIONS MOVEMENT

"The Hawthorne Studies."[2] As described in virtually every book written about management, the human relations or behavioural school of management began in 1927 with a group of studies

conducted at the Hawthorne plant of Western Electric, an AT&T subsidiary. Curiously, these studies were prompted by an experiment carried out by the company's engineers between 1924 and 1927. Following the scientific management tradition, these engineers were applying research methods to answer job-related problems.

Two groups were studied to determine the effects of different levels of illumination on worker performance. One group received increased illumination, while the other did not. A preliminary finding was that, when illumination was increased, the level of performance also increased. Surprisingly to the engineers, productivity also increased when the level of illumination was decreased almost to moonlight levels. One interpretation made of these results was that the workers involved in the experiment enjoyed being the centre of attention; they reacted positively because management cared about them. Such a phenomenon taking place in any research setting is now called the Hawthorne effect.

As a result of these preliminary investigations, a team of researchers headed by Elton Mayo and F.J. Roethlisberger from Harvard conducted a lengthy series of experiments extending over a six-year period. The conclusions they reached served as the bedrock of later developments in the human relations approach to management. Among their key findings were the following:

1. Economic incentives are less potent than generally believed in influencing workers

to achieve high levels of output.

2. Leadership practices and work-group pressures profoundly influence employee satisfaction and performance.

3. Any factor influencing employee behaviour is embedded in a social system. For instance, to understand the impact of pay on performance, you also have to understand the climate that exists in the work group and the leadership style of the superior.

As a consequence of the Hawthorne studies, worker attitudes, morale, and group influences became a concern of researchers.

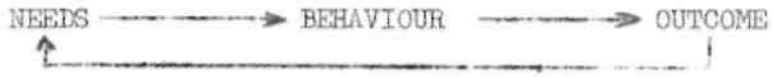
2.2 MOTIVATION AND JOB PERFORMANCE

Managers are virtually concerned with organizational behaviour of subordinates. They are also interested in discouraging behaviour that is counterproductive to organizational objectives.

Before managers can act on these concerns they need an understanding of what is, and what might be, in the work setting that would motivate subordinates to perform their jobs well. It is therefore necessary to examine the problems managers face when making decisions in the light of human needs and motivation while attempting to elicit the best job performance possible from subordinates.

2.2.1 A SIMPLE MODEL OF MOTIVATION

A simplified model can be used to illustrate conceptual components and their relationships in human motivation. A typical representation of the motivation process involves needs which stimulate behaviour which results in an outcome which satisfies the original need.



People behave with a purpose, even though they may not be fully aware of the extent of those purposes. Working backwards from that observation, it can be inferred that behaviour is not random, accidental or formless. Rather, behaviour is goal oriented. From our experience, we learn that behaviours give us pleasure or satisfaction. All other things being equal, the law of effect says that we will usually try that behaviour again when faced with a similar need or situation. So people in organizations are quick to recognize what kinds of behaviours will result in expressions of the supervisors approval.

The interpretation of this model is that people have needs - these needs come into a position of prominence and mobilize energy in the person to act - this action/behaviour is directed towards things that will satisfy the need. If the consequences of the behaviour are appropriate the original need is satisfied and reduced.

Organisations strive for performance, effectiveness and goal attainment, but organisations are comprised of people who are required to perform tasks to bring about these objectives. It follows that some notice should be taken of the match between the valve of the work they are to perform and the individual's needs and motives in order to achieve effective work performance.

Job performance is of much importance to management and performance can only happen when someone works either mentally or physically. It is the result of application of effort.

A non-motivational characteristic of performance is that many well-motivated, hardworking individuals fail to achieve work objectives because they are deficient in such characteristics as problem solving-ability, skills, and appropriate training.

Another reason why well-motivated people sometimes are not high producers is that the work group may influence them to hold back on their performance. Group norms may discourage some people from being superior performers even if they are well motivated. In such situations, the group acts as a constraining influence on the person.

The old adage, "You need the right tools to accomplish the job"[3], sheds light on the relationship between motivation and performance. Unless people have the appropriate tools, machines, facilities and equipment to accomplish their job, desire alone will not get the job done.

Thus management has to create the conditions whereby a well-motivated person can accomplish his or her objective.

2.3 MOTIVATION AND JOB SATISFACTION

Both managers and behavioural scientists have been concerned with the questions of the relationship between productivity and the level and kinds of satisfaction people find in their jobs. A common hypothesis about this relationship says that the greater the level of satisfaction in the job the more productive a worker will be. This relationship is assumed to hold because it seems to make sense that people who are satisfied in their jobs are going to be motivated to do a good job. Unfortunately, this statement over-simplifies the situation, and is generally inaccurate. Satisfaction of the individuals needs in the work situation, is often hailed as a desirable, if not essential, attainment for the organisation seeking to motivate its employees to higher levels of productivity, but does need satisfaction lead to increased production? More important perhaps is the question, is a satisfied worker a productive worker? As has been observed in previous research economic rewards are perhaps the most common means by which organisations attract and retain employees but some theories point that financial inducements are not the only rewards that organisations can offer. Jobs and the environments in which they are performed, especially in the construction industry are seldom designed to satisfy the needs or motives

of the people employed in them. It may seem obvious to state that the extent to which the individual's needs are met at work to directly related to continued employment, and that a high rate of absenteeism and employee's turnover is an indication of dissatisfaction. However, the practising manager, rather than being told the obvious, would prefer to know the reasons why employees decide to withdraw from the organisation. Research into the subject has revealed four definable areas which contain factors influencing an employee's decision to withdraw:-

(1) Central/organisational-wide variables such as pay and promotion.

(2) Immediate work environment factors, such as gang size, supervision, and co-worker relations.

(3) Job content factors such as the nature of the job.

(4) Personal factors, such as age of the employee and length of service.

These factors are wide spread throughout the organisation and tend to interact with particular types of individuals at particular times. They offer little help to the manager trying to reduce employee's withdrawal.

2.3.1 MOTIVATION AND JOB SATISFACTION - Comparison

Job satisfaction and motivation are not identical. Satisfaction refers to satisfaction of a need often resulting

in a state of contentment, motivation refers to expending effort toward a goal. One way to visualise the relationship between satisfaction and motivation is by use of a four-way diagram indicating the extremes - highs and lows with the middle conditions omitted. These four different possibilities are shown below

Job Satisfaction		Low	High
	High	Contented Relaxed Worker	Well Satisfied Hard Charger
	Low	Disgruntled Uninvolved Worker	Dissatisfied Hard Working person

Job Motivation

(a) Contented, Relaxed Worker:- Many people who have worked into a comfortable rut in bureaucratic organisation fall into this category. Some people derive job satisfaction from working in a relaxed, non-pressured atmosphere. If they had to work too hard, they would experience job dissatisfaction. Family businesses, too, have their share of contented individuals who expend very little effort towards achieving company goals.

(b) Disgruntled Uninvolved Worker:- People who fit into this category are often under stress. They dislike their jobs yet work hard enough to prevent being fired or receiving

serious reprimands. However, there are occasional people in managerial positions who dislike their jobs and are not particularly interested in working. Economic necessity forces them to work.

(c) Dissatisfied Hardworking Person:- Many people with a professional orientation work hard even if they are currently dissatisfied with their company, management or working conditions. Often people with technical trainings find themselves in jobs that do not properly challenge their capacities. They nevertheless persevere, believing that conditions will improve or that they can change jobs later. A professionally oriented person will not want to damage his reputation by performing poorly, even if a particular job was unsatisfying.

(d) Well Satisfied, Hard Charger:- A person in this category is usually on the path toward self-fulfilment. Many branch managers and successful small business persons are also well satisfied and hard working. A young man with a small, but busy and profitable landscaping business said of his work, "I happily work ten hours a day because landscaping is my thing."

2.4 ORGANISATION, LEADERSHIP AND SUPERVISION

2.4.1 ORGANISATION

For the purpose of this study, it is necessary to discuss some broad outlines of fairly consistent frameworks recognizing behaviour in the larger groupings we call organisations.

Our definition of motivation has mentioned the involvement of individual as well as group. It has therefore been expressly stated that study of group behaviour is important because individual spend most of their time with others and are influenced by them. Whatever is mentioned of small groups may be taken as a basis for discussion of the larger groupings called organisations.

A definition of organisation is not easy to give but "when goal-directed activities are co-ordinated rationally by assignment of duties and responsibilities, this rational co-ordination is the organisation."[3] Organisation has been described as "The process of dividing the work of an undertaking into groups consistent with the talent of individuals, and the arrangement of such jobs into the most appropriate framework for the achievement of the aims and objectives laid down".[4]

The organisation may be considered as a system of roles. In the system, each individual has a specific role to play. This then calls for the definition of a role.

According to Linton "a role represents the dynamic aspect of a status... when he puts the rights and duties which constitute the status into effect, he is performing a role."[5]

As individuals have multiple statuses, so they have many roles appropriate to each.

Organisation structure an example of which is shown overleaf is the breakdown of management responsibility into appropriate sections and the determination of the relationships between sections. The organisational structure of a company and the balance between the several activities within the company are basic determinants of productivity. Costly resources are wasted if people are unclear about organisational relationships. Time is wasted if employees waste it in trying to find out what they are supposed to do rather than doing it. Many managers handle their physical and financial resources acceptably but overlook the cost of human resources that result from poor organisational dynamics.

Three basic types of organisation structure are line, staff and functional, but it is unrealistic to suppose that a particular company structure will necessarily be of one or other of these basic types. It is always necessary to incorporate in the organisation the relationship needed for corporate activity, as well as those for a division of the duties of management into tasks capable of being carried out by the managers likely to be available.

The formal relationships between management positions within the organisation structure can be classified in a similar manner to the structures themselves. It is necessary first to classify the various types of management position associated with the types of organisation structure.

Operating management positions that involve responsibility for the main activities of the enterprise are described as true positions. They are in the line of command along which the orders and instructions are passed down to the scene of operations. Management positions that tender specialist advice to improve the operating managers' effectiveness are described as functional. Aides established to assist management by extending the managers' personality are known as staff. The resulting inter-relations between these positions in the organisation structure can be classified as follows:

(a) Direct relations:- which exist between superior and Subordinate positions at every level of the line of command. The description comes from the exercise of direct authority by the superior or senior level in relation to the work of the subordinate or junior level.

(b) Functional relation:- are those existing between specialist management positions and the operating managers. They arise from the provision of a service of advice and direction that has been introduced into

the organisation by the division of mental activity. They are therefore the relations that exist between the manager responsible for providing a service and the manager who receives it. The authority involved is only indirect, since the creation of the functional post must not interfere with the general application of the operating managers' authority along the line of command. The scope of the responsibilities involved in a functional relation is restricted to the application of the specialist knowledge of the functional manager.

(c) Staff relations:- are personal to the assistant and his own chief. The staff officer has no formal contact with anyone else in the undertaking. He has neither authority nor responsibility in the true sense of these words. His authority is, however, sometimes described as representative, since he can be deputed to represent his chief. His commensurate responsibility is then advisory only, whether this is for co-ordination and command.

Difference of Task at different Management Levels.

Level of Management	Authority	Responsibility
Chief Executive	With Executive heads of Divisions	For seeing that policy is carried out and objectives attained
Executive Head of a Division (e.g. Accounting)	With Heads of Departments within the Division	For determination of sectional policies and obtaining satisfactory results on own initiative
Departmental Manager	With Subordinate Supervisors	For deploying resources for the accomplishment of programmes and specifications
Foreman	With Workers familiar with routine but requiring instructions for deviations	For satisfactory workmanship with frequent checking in relation to specified standards of quality and time.

Source - See (7) pg. 54.

An important feature of an organisation structure is for it to permit the maximum co-ordination of activities by encouraging harmony. It is advisable to view the static structure critically to see whether or not the framework provides an effective support for co-ordination when the dynamic aspect of management is introduced.

In industry, there are often five or six levels of management between the worker on the shop floor and the managing director who is the principal executive responsible for the overall affairs of the company.

The table illustrates some of the differences in the task allotted to the managers at different levels in a typical factory.

Although the scope of the task varies at different levels or ranks, the kind of task does not change. The variation results in a progressive restriction of the task in relation to both responsibility and initiative, as the manager is more and more remote from the top executive.

It could be seen that organisation can be considered to be a structural framework which comprises the relationships and responsibilities of all the managers of an undertaking. When viewing the situation to determine specialist knowledge, for personal planning, or for any other form of assistance for which the aide has been established.

In addition to the relationship between different types of manager, there are other formal relationships

existing between executives at the same level, whether these are within the operating division or within some functional division. They are known as lateral relationships and some formal arrangements is necessary to avoid conflict between the two types of relationship - vertical or line, horizontal or lateral. Conflict is avoided by adopting the theory whereby the relationship in practice is created with the knowledge of the line superiors of each of the participants. The Subordinates involved in the lateral relationship report back to their superiors so that the results of the contracts are not cloaked in secrecy. Lateral relationships may be of two types:

(1) Colleague relationships:- Those between managers in the same department who work together and owe allegiance to the same superior

(2) Collateral relationships:- The formal contacts necessary for the discharge of responsibilities between managers in different departments whose work is interdependent.

In the best organisation structure, all management functions are carefully defined. This process reveals the extent of the work to be divided amongst the managers to be employed. The definition of functions must take into account the need for co-ordination as a prerequisite of effective practical

management within the structure. The capacity of persons to whom posts are assigned must also be considered as the collections of activities or jobs will have to be carried out by these individuals.

2.4.2 LEADERSHIP

One of our definition of motivation has inferred it to be the process of leading workers to achieve an organisational objective. What then is Leadership? Leadership is the process of influencing people to achieve certain objectives.

There is almost universal agreement that individual productivity is significantly influenced by the superior - Subordinate relationship in the work situation. This relationship can be productive or non-productive depending on the leadership style of the superior. It is therefore important for all managers to examine their style and make changes if required.

Leadership would not be possible if people did not comply with orders, directives or suggestions of leaders. An act of leadership has not been completed until the person or persons you are attempting to lead actually carry out a command or suggestion.

The key work in understanding the concept of leadership is influence. If influence is not necessary, an act of leadership has not been performed. If leadership in the industrial setting is taken to mean "the kind of behaviour by an individual which inclines other people to accept his

guidance", it is essential for it to be a general accomplishment of all managers.

Although everyone seems to agree that leadership is important, there is far less agreement on what constitutes good leadership or the content of leadership theory. In order to ensure that the people one is leading actually carried out ones order or command, it is important to analyse the situations or reasons that make people comply with leaders.

(a) The Psychological Contract

People in an organisation will "go along with" a leader because of an unwritten contract between themselves and the organisation. If your company pays you on time, provides you a pleasant working atmosphere, gives you opportunities to socialize with people and so forth, you will be willing to comply with the many favours they ask in return. Among these are to produce work, complete most assignments on time and be physically present at least 95% of the time.

"The individual has a variety of expectations of the organisation and the organisation a variety of expectations of him or her. These expectations not only cover how much work is to be performed for how much pay, but also involve the whole pattern of rights, priviledges, and obligation between the worker and the organisation."[8]

people through coercion will not keep capable subordinates for long. Coercive leadership is usually self defeating and unethical.

Substantial research has shown that leadership is best understood when the leader, the follower and the situation in which they are placed are analyzed. Nevertheless, the leader remains important in consideration of leadership. Without effective leaders, most organisations will not prosper and without the knowledge of leadership behaviour, the selection of a leader will be left to chance. The choice of a leader is an important factor of consideration in motivating employees to greater productivity in an organisation.

Some of the requirements of a leader are:-

(1) High intelligence level

(2) Sensitivity to situation

(3) Effective work habits

(4) Initiative

(5) Self Confidence

If increased productivity is required, an effective leader should be able to:-

1. Resolve Conflict before it can become damaging to co-operation, organisation interraction and achievement of results. A major reason why conflict develops in an organisation is that people do not understand what results are expected of them or their co-workers.

2. Allow participation in decisions for that aspect that affects the employees.

3. Encourage creativity and innovation in work methods that provide better results in terms of subordinate fulfillment and achievement.

4. Manage by results based on upward communication and establishment of goals by subordinates.

5. Provide Control and feedback that fulfils the requirements of:

   (a) clear understanding of results expected
   (b) information on progress and
   (c) information for self monitoring and control.

6. Maintain morale that is grounded in good performance.

7. Negotiate and maintain commitments to goals that are established in the superior - subordinate relationship.

8. Set out stretch objectives that require subordinates to reach out for productivity and satisfaction.

9. Develop subordinates by providing opportunities for growth.

10. Utilize appraisal as an opportunity for setting future objectives rather than focusing on reward

or punishment based on past performance that is judged on traits.

11. The final requirement for a good leader is that his style and behaviour should have a positive impact on organisational growth.

Nevertheless, the effectiveness of leadership depend mostly on the favourability of the situation. A situation is the most favourable when:

1. The leader's personal relationship with members of the group is good.
2. The position held by the leader carries considerable formal power and authority.
3. The task to be performed by the group is well structured and well defined.

2.4.3 SUPERVISION

In order to ensure that resources are used effectively, managers must supervise, lead and motivate their workers to greater productivity. As the quality of leadership is not instinctive in everyone, care is necessary in the selection and training of those on whom the responsibilities of supervision are to fall.

Human activities for any substantial purpose must inevitably be carried out by groups of people working together. There has to be a head of affairs to direct the

activities of each group if all the work of the many people co-operating is to be harmonised towards a useful objective. A substantial purpose of the study of organisation as a theoretical structure has been seen to be the preparation for such co-operation. It is usual to use the term supervision in a restricted sense, to indicate only the guidance of groups of workers. Supervision thus describes the task of managers who are in direct contact with the operatives, and whose concern is the guidance of their work.

The initial need in supervision before any real guidance can be provided, is the constructive resolution of any conflict both within the group and between the group and the supervisor. It will be apparent that the principal Feature of a supervisor's work is his ability to ensure that people work in harmony within the group in which they are placed, and that the group activities are harmonised with those of other groups in the undertaking. There are two general methods in which this co-operation can be achieved:

(a) Coersion - through fear of the consequence of not co-operating; and

(b) Persuasion - encouragement of a desire to co-operate.

Coersion of the individual is one of the older ideas of command in industrial management. Although it is still used as a means of insisting upon the performance of certain acts by workpeople, it has serious disadvantages in its practical

application. The original conception of command as a means of maintaining activity among all personnel was associated with autocrats in the management of the companies of their day. A ruthless business flair was often part of the make-up of the personality of such a manager and this produced favourable results according to the profit and loss account, though humanities were generally disregarded.

Nobody can make an effective contribution to the work of an organisation unless he knows what he is supposed to do and this should preferably be expressed in terms of stated objectives. He needs to have a clear understanding of his authority and its limits, also to know when he has the right or duty to take independent action. He must know and understand his relationships with other people in the organisation, so that he can see exactly where he fits into the general scheme of things. As a human being is not often capable of evaluating his own performance unaided, it will be one of the duties of a supervisor to make sure that operatives know the results expected of them. He must also make it his practise to give credit when it is due and contrariwise to tell a worker when he is falling short of results expected. As errors happen from one or more of a considerable number of causes, it is necessary to let workers know why results are unsatisfactory and what must be done to improve them.

Subordinates should be made to feel that their individual contribution is important to the whole department and that they are not wasting their time, a sense of failure

which is probably more detrimental to morale and productivity than any other state of mind.

Subordinates will not do their jobs properly if the supervisor fails to recognise the value of the work done or even if he does recognise it and still does not make this known to others. The worker wants to feel that his superior has an interest in him as an individual human being and not as a means to an end. It reinforces his motivation to work if he sees that his superior is anxious for him to make progress and succeed and if he himself sees concrete evidence of rewards for work capably done.

The activities of a supervisor cover a number of fields and the responsibilities include:

1. Making sure that the planned output is indeed obtained from the section he commands. To do this, he must allocate tasks to individuals and groups and must personally supervise the performance of jobs.

2. Discharging production responsibilities such as assuring workers of their materials and tools and prompt maintenance service.

3. Achieving the required quality standards by exercising the skills of instructions and by regular inspection of work.

4. Controlling the costs of production wherever they affect him and discharging the duties of cost reporting.

5. The management of individuals and groups at work, involving a study of motivation and incentives, of consultation and the effective handling of grievances, and a responsibility for welfare and safety.

6. The continuing improvement of methods, usually in association with work study and other management services staff.

7. The development of his abilities to communicate in order to use the process of communication to the full.

8. A knowledge of the legal regulation of the industry and employment.

The supervisor is therefore bound to know and appreciate the objectives of the section entrusted to him. He must be able to control the behaviour of other human beings and cope with the machines and materials which produce the output of the section. He needs a sustained interest in the job itself and must know each person on the section well enough to be aware of any special aptitudes or abilities which that person possesses. And he must accept responsibility for the safety and welfare of everybody he supervises.

2.5 FINANCIAL INCENTIVES

For many years, great faith has been placed in the ability of financial incentive scheme to increase productivity, reduce costs and so increase the level of earnings. Actively encouraged by governments, employers and unions, these schemes are now so widely accepted that they form an inherent part of the industrys' formal wage structure.

Incentive approach to motivating employees are based on the view that workers are eager to maximise their monetary status, power and prestige. Managers who follow this approach usually "dangle the carrot" to get workers to produce. Incentive schemes have been based largely on the classical motions of management which suggests that there is a direct relationship between reward and effort, with money being the prime motivator.

2.5.1 FINANCIAL INCENTIVE IN THE BUILDING INDUSTRY

The introduction and development of financial incentive schemes has arisen from two factors: the need to achieve greater overall productivity within the building industry, and the wish of building firms to be more efficient in their use of labour.

Incentive schemes were first introduced into the building industry on a formal basis with the use of the payment-by-result scheme which began as a war-time measure. The scheme was designed to achieve increased productivity on government projects and its operations conformed with

standards set by the then Ministry of Works. (According to the Department of the Environment and the Property Service Agency).

The objective of financial incentive schemes set out in the National working rules are:-

(1) To increase efficiency, thereby keeping the cost of the building at an economic level.

(2) To encourage greater productivity, thereby providing an opportunity for increasing earnings by increased effort, while maintaining a high standard of workmanship and avoiding waste of labour and materials.

Most incentive schemes are of a straightforward nature and involve paying operatives a percentage or proportion of the savings made on a pre-fixed target being represented in terms of either man-hours or labour costs. The difference between this and actual cost is the saving a proportion of which is paid to the operative.

Proportions of savings paid range from 50% to 100%, the latter being the award of the total amount saved. The philosophy behind proportional schemes is that the saving made are divided between operatives and employer, satisfied by the fact that the share received by the employer contributes to the cost of running the scheme.

2.5.2 FINANCIAL INCENTIVE AND PRODUCTIVITY PERFORMANCE IN THE BUILDING INDUSTRY

There is a basic promise that the use of incentive schemes is an effective means of increasing productivity. However, there is no hard and fast stastical evidence to suggest that this is so; until such evidence is forthcoming, the case for widespread use of incentives must rest on a high degree of faith in their practical and conceptual application.

In an attempt to establish a relationship between incentives and productivity, two basic problems must be considered:-

1. The measurement of productivity.
2. The measurement of that part of any productivity increase attributable to the operation of incentives.

Productivity has been said to be the degree of efficiency with which available resources are used. Perhaps the simplest method of expressing productivity is by dividing quantities of output by the size of the labour force. However, although this may appear to be straight forward, the practical difficulties encountered in measuring these components are formidable.

In order to assess the proportion of such productivity increases attributable to the operation of incentive, it is necessary to bear in mind that productivity is influenced by more than just the efforts of the operative labour force.

It is therefore necessary to consider the operation of the whole system of producing buildings - that is the construction process - and the major sub-systems within it, the systems being design and production.

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CHAPTER THREE

MOTIVATIONAL THEORIES

3.1 BACKGROUND OF APPROACH

The majority of early and contemporary theories of motivation are based, to some extent, on a concept dating back to early Greek philosophers, known as hedonism. This theory suggested that individuals tend to seek pleasure and avoid pain, through a certain degree of conscious behaviour by the individual in making intentional decisions or choices regarding future actions. This theory remained popular as an explanation of behaviour until the 1800's when motivational theory began to progress from the realm of philosophy towards the more empirically based science of psychology. During this transition, confusion reigned and several theories of motivation began to evolve, based on empirical studies, which attempted to verify relationships as a basis for predicting behaviour.

The earliest of these theories, presented by James, Fend and McDougall were known as *instinct theories[1] and argued that, rather than man being a rational animal pursuing his best interests, a more complex explanation existed including two additional variables of instinct and unconscious motive.

These theories of motivation were generally accepted until the early 1920's when, as a result of constant criticism, they gave way to a second school of motivational

theorists who proposed an alternative drive theory of motivation. They believed that learning had a significant influence on human behaviour, and generally assumed that decisions concerning present behaviour were based, to a large extent, on the consequences or rewards of past behaviour.

There are three general approaches to motivating workers toward greater productivity: the economic incentive approach, the behavioural approach and the management approach.

3.1.1 THE ECONOMIC INCENTIVE APPROACH

(1) How to use rewards and work conditions to perform well on the job.

(2) How to use incentives to get people to meet job expectancies.

(3) How to urge and persuade people to behave in certain ways.

(4) How to help people get what they want by showing them how to get what an organisation wants.

3.1.2 THE BEHAVIOURAL APPROACH

(a) How to meet the needs of people on the job.

(b) How individual motives will form the basis of the will to work.

(c) How organisational behaviour can be modified by getting individuals to modify their own behaviour.

(d) How to improve the quality of organisational life by changing conditions of the job.

3.1.3 THE MANAGERIAL APPROACH

(i) How to meet the needs of both people and the organisation.

(ii) How to set incentives so that people and organisation profit.

(iii) How to fit people and organisation goals into the situation at hand.

(iv) How to select, from the range of possibilities, the necessary approach that will work for workers and the organisation.

Although these three approaches are oversimplified they represent three general approaches to motivation. The third approach, termed the electric approach, selects from the other two, the motivational process that fits the situation at hand.

3.2 FINANCIAL INCENTIVE APPROACH

It has been mentioned that the incentive approaches to motivating employees are based on the view that workers are eager to maximise their money status, power and prestige. Adam Smith's book - The Wealth of Nations published in 1776 had a tremendous influence on economic and political theory. Smith lived in an era in which people struggled for basic material needs. Consequently, Smith insisted that people are oriented toward self-interest. Give them incentives that are strong enough and they will be motivated. Smith said

this would work because of the following assumptions:

1. Workers want and need monetary gain, hence will do what achieves for them the greatest gain.
2. Workers are only a small element within an organisation. The organisation controls the monetary gain and therefore can control motivation.
3. Workers do not understand organisational interests and goals therefore must be prevented from interfering.
4. Workers' feelings must be controlled by the organisational structure. The organisation should even encourage and develop workers' feelings and goals to be the same as those of the organisation.

To Smith, monetary rewards should be set in steps with levels and amounts based on the results contributed to the organisation.

Enormous increases in productivity and output would occur because each person has strong economic self-interests. When operating in a fully free and competitive market, it would result in the greatest gain for the individual.

Summary - How to motivate according to Smith - Give workers financial incentives strong enough to experience monetary gain.

3.3 PIECE RATE WORK STANDARD APPROACH

Taylor started systematic approaches for accomplishing work with time and motion studies. He would divide the work into chuncks, determine the best time to produce these chuncks establish these work chuncks, as standards, assign pay rates for completing these standards and give training and development to works to perform to the standards. Taylor used this approach because his analysis of the worker and the work showed a haphazard and random process for its accomplishment. The inefficient, wasteful movements and energy frustrated and demotivated the worker. Taylor pursued these assumptions:

(1) Workers can be driven only to a point, and therefore the work situation most change.

(2) Workers would work more if their work were made simpler and easier.

(3) Workers get greater results if the work were made separated into parts and people were allowed to specialize in these parts.

(4) Workers contribute more to the organisation when work is defined into chuncks and standards of performance are established with pay increases.

Taylor felt people would work to high levels when the job and its processes allowed them to do so. Although Taylor placed great importance on the value of money, he stressed the need for examining the job situation and developing a

systematic approach to utilizing workers for accomplishing the work. Work must be divided and assigned to those best fitted to do it. Workers needed to be scientifically selected, trained and developed in the jobs they are best suited to do.

Summary

How to motivate according to Taylor - Give workers a job in which work is broken up into standards, assign pay to these standards and give an easy procedure to reach the standards.

3.4 JOB ANALYSIS AND WAGE STRUCTURE APPROACH

Hugo Munsterberg classified worker traits, skills and knowledge in an effort to match worker abilities and skills with job requirements. His work analysis was a process of measuring worker traits and assigning weights of importance for making compensation decisions. Munsterberg used this approach to differentiate jobs and to measure successful performance on these jobs.

Munsterberg pursued these assumptions:

1. Workers see importance in their reward levels in one organisation compared to working for another organisation.
2. Workers see job satisfaction and wage level as an important measure for deciding on one job from among many.

3. Workers see the money rate structure from low to high as a promotional opportunity to go up the organisation. The rate structure is a measure of how well one is succeeding.

4. Workers will contribute more if merit recognition will allow them to jump steps in the rate structure.

Munsterberg felt that once job classes and levels, with their money rates, are established, workers have a scorekeeping way to compare their achievement in their present job with other jobs in other organisations.

Summary

How to motivate according to Munsterberg - Give workers a job structure in steps, assign money rates and provide merit evaluation when it is recognized that these jobs have been well achieved.

3.5 HIERARCHY OF NEEDS APPROACH

Humans are wanting beings. There is always some need they want to satisfy. Maslow indicates that humans are motivated by these needs as they perceive them. These needs are urging individuals toward fulfillment and satisfaction. They are driving individuals to certain states of behaviour. The higher order of needs becomes potent only after basic needs have been satisfied.

An orderly development of the broad physiological and psychological need classification theory was put forward by Maslow in 1943.

Maslow's model expresses two fundamental ideas. Firstly, human beings are largely wanting animals: motivated by the desire to satisfy certain specific types of need and secondly that these needs, although varying in intensity, are universal across most populations and are arranged in a hierarchical form.

Based on clinical observations, he identified five sets of goals which he termed as basic needs which if largely unsatisfied, tend to produce tension in the individual. This being so, the individual is likely to behave in a certain fashion in the hope of reducing the tension and restoring internal equilibrium. Once a need becomes, to some extent, satisfied, it loses its potency as a motivating force until it again becomes unsatisfied. A full explanation of these needs is as follows:-

(a) Physiological needs

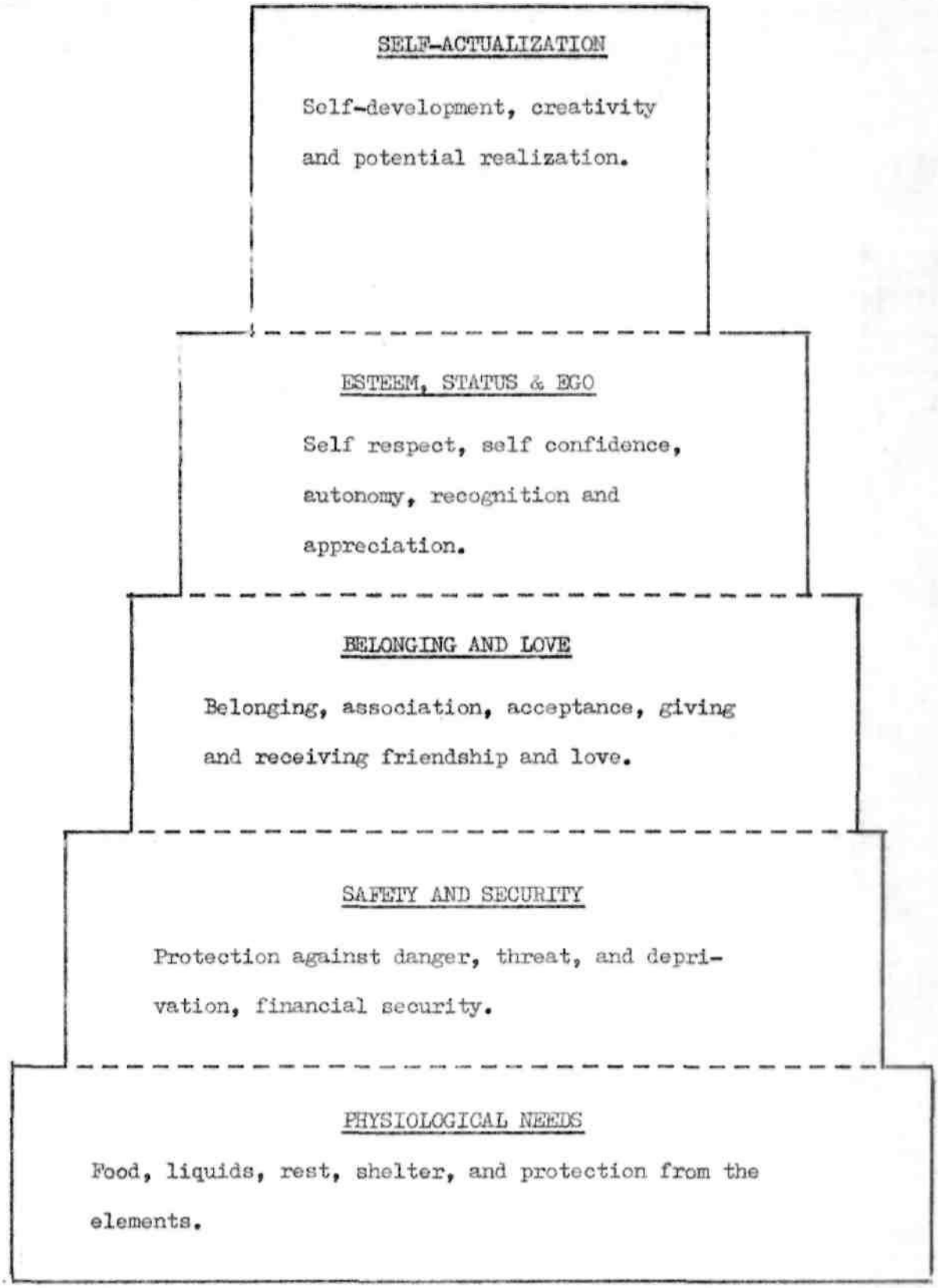
The needs that are usually taken as the starting point for motivational theory are the so called physiological drives, and are undoubtedly the most potent of all.

These are the basic need for food and shelter and Maslow argues that unconciousness is almost completely pre-empted by hunger. Human capacities

which are not of use in overcoming such a need, lie dormant or are pushed into the background.

"Obviously a good way to obscure the 'higher' motivations and to get a lopsided view of human capacities and human nature, is to make the organism extremely and chronically hungry or thirsty ... it is quite true to say that man lives by bread alone - when there is no bread".[2]

These needs, when satisfied, cease to exist as active determinants of behaviour until some future time when the individual becomes hungry again, and as these are satisfied needs, behaviour is then motivated towards the satisfaction of the next order needs.



MASLOW'S NEED HIERARCHY

(b) Safety Needs:-

If the physiological needs are satisfied, then there emerges a new set of needs referred to as safety or security needs. Generally in a well ordered society, individuals are protected from sources of threat to personal safety. Therefore, they no longer have any safety needs as active motivators, and a need for security is also a less severe safety need, and can be expressed by the individual's preference for a pensionable job, saving money to provide for the unexpected and by arranging insurance cover. With the protection these contingencies can provide, the need is usually satisfied and therefore higher order needs again take priority.

(c) Belonging and love needs:

Once the lover order needs are satisfied, the love affection and belonging needs will emerge and the whole cycle will repeat itself with this need at its centre. The individual will seek affectionate relations with other people and particularly, membership of a group, and he will strive with great intensity to meet this need. These needs involve both giving and receiving love.

(d) Esteem and Status Needs

All individuals in a society have a need or desire for a stable, firmly based, high evaluation of themselves, for self-respect and for the esteem of others. It is essential for need satisfaction that this must be based upon feelings of capability and achievement as well as perceptions that other recognise these qualities in the individual.Satisfaction of these self-esteem needs leads to feeling of self confidence, usefulness and adequacy. Lack of need satisfaction leads to feelings of inferiority, weakness and helplessness which, in turn give rise to either basic discouragement or else compensatory or neurotic trends.

(e) Self-fulfilment needs:

Even if all of the lover needs are satisfied, it is likely that a new restlessness or discontent will develop unless the individual is doing what he considers he is fitted for. This is the desire for self-fulfilment. It refers to the desire on the part of the individual to grow and develop where he has become everything he is capable of becoming. It is not necessarily a creative urge, although where a person has the capability, it is likely to take a creative form.

The clear emergence of these needs rests upon prior satisfaction of the physiological, safety, love

and esteem needs and then once this fulfilment need is met, it is assumed that we have a fully-satisfied and healthily creative person. This statement might mislead one to believe that each need must be fully satisfied before the next need emerges. However, in truth, partial satisfaction is sufficient. A more realistic description would be in terms of decreasing percentage satisfaction as one proceeds up the hierarchy.

Summary

How to motivate according to Maslow - Give workers opportunities in a work situation in which they can fulfill their needs.

3.6 THEORY X THEORY Y APPROACH

McGregor develops two sets of contrasting assumptions about humans and their perceptions about work. These assumptions become determinants of leadership styles and motivation of people.

(a) Theory X Assumptions

(a) Workers inherently dislike work and when possible will avoid it.

(b) Workers have little ambition, shun responsibility and prefer direction.

(c) Workers want security.

(d) Workers have to be coerced, controlled and threatened to attain organisational objectives.

(b) Theory Y Assumptions

(a) Workers will seek responsibility when conditions are favourable.

(b) Workers want to direct and control their own commitments.

(c) Workers want reward commensurate with their commitments.

(d) Workers want opportunities to make significant contributions to organisational objectives.

According to McGregor, managers have trouble motivating their workers because they hold erroneous assumptions about the nature of people.

Managers need not accept the assumptions of Y, but neither should they abandon the limiting assumptions of X. This would mean opportunities for developing employees for growth and productivity would be motivational.

According to McGregor, you cannot motivate people directly. Motivation comes from within. This motivation expresses itself in outcome behaviour when conditions allow it.

Summary

How to motivate according to McGregor - Give managers a new view and set of attitudes about people and their environment for best advancing goals of people and the organisation.

3.7 MOTIVATION - HYGIENE THEORY APPROACH

Herzberg proposed a motivation - hygiene theory in 1959. This model, which has also been called the two-factor and the dual-factor theory, is more rapidly accepted by practising managers.

Herzberg identifies job elements that generate positive feelings as satisfiers and job elements that generate negative feelings as dissatisfiers. Satisfaction and dissatisfaction are separate factors, not end points on a continuum. Satisfiers are also called motivators because they are effective in motivating employees to greater productivity. Dissatisfiers are also called hygiene factors because they prevent dissatisfaction from occuring but do not induce people toward extra effort.

Five job conditions that stand out as high determinants of satisfaction are:

(1) Achievement

(2) Recognition

(3) Work itself

(4) Responsibility

(5) Advancement.

The dissatisfier factors are:-

(1) Organisational policies

(2) Administration

(3) Supervision

(4) Salary

(5) Interpersonal relationships

(6) Job Security

(7) Working Conditions.

Herzberg concluded that there are some job conditions which when absent, operate primarily to dissatisfy employees but their presence does not conversely operate as a strong motivator.

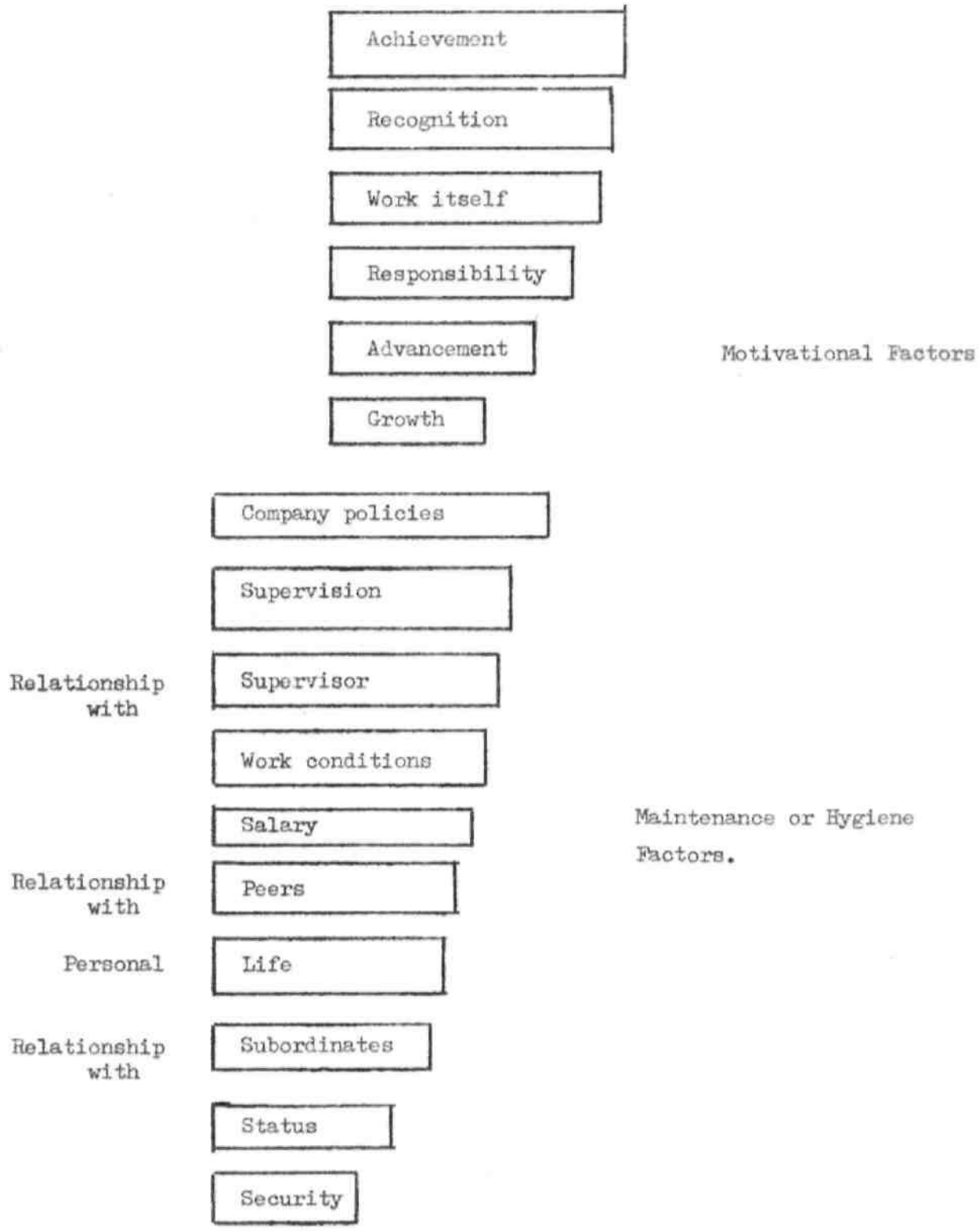
Herzberg called these potential dissatisfiers maintenance factors because they are necessary to maintain a reasonable level of satisfaction in employees.

Another set of job conditions were found to operate primarily as strong motivators and satisfiers, but their absence rarely caused employee dissatisfaction. These are called motivational factors as they motivated satisfied employee.

Motivational factors such as achievement and responsibility mostly are related to the job itself. Motivators tend to be job-centred, and therefore related to job content. Maintenance factors, on the other hand, are mostly environment-centered and related to job context.

Summary

How to motivate according to Herzberg - Give workers motivators within the job content that will lead to satisfaction.



HERZBERG'S MOTIVATIONAL MODEL

3.8 MANAGEMENT APPROACHES TO MOTIVATION

The management approach to motivating workers is based on the view that there is no best way to motivate. Different organisations with different tasks, different competitive environments, and different worker needs require different approaches to motivating. Management approaches are therefore an ecletic synthesis of other approaches that will best fit the factors of a situation. It is difficult to isolate each approach since there is a great deal of overlapping and similarity.

(a) Contingency Approach. There are many contributors to the contingency approach. It recognizes the substantial differences between and among organisations and their constituencies. No one model for motivating will work for all organisations. The appropriate organisational structure, leadership, staffing, planning, motivating, and control are contingent upon the nature of the organisational environment and the task to be performed. Thus the emphasis is on researching the practices and methodology that are appropriate for the situation and adopting the one that works. These are the assumptions of this viewpoint and approach:

1. Worker situations differ. These differences affect how managerial knowledge is applied. Different organisations with different tasks and different competitive environment require

different plans, just as every human personality and every organisation is unique, so every managerial position or situation is unique.

2. Differences in working environment, rather than similarities, are the basis of establishing a management practice.

3. Worker motivational practices cannot be applied across the board. They may be true and useful for a particular problem in a particular situation.

The contingency approach is based on the major idea but there is no one best way to handle any of the various management functions and problems. There is no one best way to plan; there is no one best way to control; there is no one best way to motivate. The best way is developed after careful research and analysis of the particular situation faced and applying a planned effective approach to the problem.

How to Motivate According to Contingency Approach: Analyze the situation and select elements from the vast array of principles and techniques that would form a model for motivating workers in a given situation.

(b) Systems Approach. In recent years increasing use has been made for a body of systematic relationships within the organisation. These system constructs provide key

tools for a diagnosis of human interactions of persons, groups, organisations, and communities. These are the assumptions of this approach.

1. A systems model can be developed that has universal applicability to physical, social, and human relationships, whether the organisation be small or large.

2. A systems model brings a "unity" of "coherence" for the wide variety of needs, interest, attitudes, and motives of an organisation.

3. A systems model captures the way in which the organisation works and predicts what would happen if some new motivational factor were introduced.

A systems model is designed to link the critical parameters of the operations and environment situation. The model is then used to simulate the effects of human interactions and motivations when changes are introduced or situational factors are removed.

How to Motivate According to The System Approach:

Develop a system model for the organisation to establish its current motivational processes and proceed with finding the change-agents for its improvement.

(c) Expectancy Alignment Approach. It recognizes that the complexities of people, situations, goals and organisational needs are too formidable for simplistic methods. Literally, this motivational approach requires an assessment of the needs of both the organisation and people and a way of creating a situation in which both these needs are accommodated within "states of expectancies".

Assumptions

1. Worker needs are extremely complex and change with changing values, attitudes, interests, and wants. Similarly, organisational needs are extremely complex and change with changing markets, products, services, environment, legislations, and goals. Both of these "packages" of needs are continually changing. A purpose for both groups must be established to provide something to which complex changing needs can be related or made coincident.

2. Workers' needs are in disparity with organisational needs. Both cannot have their needs fully and completely satisfied. A compromise between two packages of needs is often workable for both.

3. Worker and organisational needs vary not only in number but in the degree of importance assigned to these needs. The degree of importance changes as the situation changes for both worker and organisation.

4. Worker needs that are aligned or coincident to organisational needs are more apt to be pursued intensively because workers are reaching to satisfy their own needs and in the process they satisfy organisational needs.

5. The alignment between organisational needs and worker needs is at best an "accommodating fit" among all of the variables in a given situation at a given time.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 INTRODUCTION

Many motivation processes are used in the building industry to attract workers with suitable ability, retain the services of trained and qualified personnel and also to gear workers to high level of productivity.

Since the primary objective of this study is to present broad motivation guidelines that contractors can use to motivate their workers to better performance, it is of particular relevance to the theme of the study to carry out investigation concerning the present state of this act.

A list of different categories of some firms in various locations in the country was made. From this list, a random sample was selected and about half of this was targetted for visitation. Of this half, about forty percent were subsequently interviewed. The questionnaire is designed by the author and included in the appendix. The result reported here are findings from foremen and the lower level work force on construction sites in understanding the most significant factors affecting their motivation and productivity.

The source of findings involves interview and questionnaires filled by foremen and interviews with the managers, the craftsmen and the labourers.

4.2 INVESTIGATION FIRM A

4.2.1 BACKGROUND INFORMATION

The name of the firm is Belag Construction Company, one that specialises in the industrialized building systems. This is a system of building in which a whole structure is broken down into different units and component that make up the whole structure from the design. The units and components are manufactured in the factory and are transported onto the sites for erection. It is a system that is technologically advanced and enhances architectural beauty as well as ease of erection.

This company first came into existence in 1975 under the name Belag Inter (Nig) Limited with its original management based in Switzerland. It was not long after the registration of this company that a dispute arose between a team in the Nigeria office and the management in Switzerland. The team in Nigeria was made up of the Chairman of Board of Directors who was a Nigerian and the Director General who was a Swiss. The team in Nigeria was trying to take up ownership of the company. This led to a court case here in Nigeria as a result of which the management in Switzerland dissolved the firm.

The firm then came back in existence in 1978, and was registered under the name of Belag Construction Company with its factory and Head Office in Kaduna town, the capital of Kaduna State.

The company is currently executing only one contract and it is that of A.B.U. Senior Staff quarters. They have two different sites in Zaria, namely the Shika site and the Kongo site.

The project consists of a total of one hundred and five structures, eighty of which are the bungalow type and the rest, twenty-five in number is the one storey structure type. Each bungalow structure is made up of forty-eight elements and storey building is made up to two hundred and forty-seven elements. The whole project is expected to be completed on or about the 16th of December, 1980.

The company has tendered for a new job with A.B.U. and they are sure of winning this job as they have no competition as far as their style of construction is concerned.

This company started off with an initial labour force of three hundred people and now has about one hundred and fifty people of which forty people are skilled labourers. Advertisement are displayed on boards at the entrance of sites when unskilled labour is required and for skilled labour, the adverts are usually put in the newspapers. Sources of labour include Zaria locality as well as Kano and Kaduna.

Among the items of plant possessed by the company are tower cranes both stationary and mobile, generator and mixers of different capacities.

The workers have an eight hour working day and are paid on a daily basis. The wage rate is determined by output and

by qualification. The wages are collected at the last day of every month. Any adjustment in the wages is made by collective bargaining between the workers headman and management.

The programme of the project is monitored by the comparison of actual output per month with the planned. The planned output per month takes the form of six bungalow structures and two storey buildings. If, however work is deemed to be behind schedule, the workers are given work on overtime basis. This is paid in the following format:

Overtime on weekdays :	Hourly pay + 25%
Overtime on weekends :	Hourly pay + 50%
Overtime on Public Holidays :	Hourly pay + 100%

In the form of annual leave, the labourers are entitled to two week/annum while the tradesmen are entitled to three weeks. While a worker goes on annual leave, he is paid a certain sum of money as leave allowance but if he chooses to stay on and work during his leave, he takes this leave allowance and is paid normally as per number of hours put in.

As far as transportation of workers is concerned, they are paid a sum of money as transport allowance, but as a means of ensuring punctuality, the site manager has made arrangements with private bus owners in town, to pick workers at a particular spot at a particular time of the day in the morning and return them back to this spot at the end of the day. While workers go on these bus services, they pay the bus owners normally.

As soon as a worker gets to the site in the morning, he signs his name on his card and "posts" it in the card box. This is not allowed after a eight o'clock in the morning when a worker is regarded as being late for work. If a worker is late on any day, he goes back home and does not get paid for the day. However, if this act of lateness is exhibited by a particular worker on three different days in one week, he gets suspended for one whole week.

4.2.2 INTERVIEW

Interview with the steel structural Engineer and the general foreman; both of Belag Construction Company. The interview took place at the Shika Construction site, Zaria.

Motivation of workers in Belag Construction Company

The main factor that motivates workers on this construction site is money, as claimed by the site engineer. Backing this factor up by some other processes which are regarded as "secondary" by the general foreman, the management of this company has been able to enjoy full co-operation of their workers. Where does money come in? On this construction site, it is the duty of the general foreman, through the workers headman at the end of each day to allocate job for each worker for the next day. As soon as the workers come on site in the morning, they just go straight to start their work. This job is allocated with the intention of eight hours output per day. However, whenever a worker completes

his job and it has been inspected by the foreman to conform with preset quality and standard, he is allowed the rest of the day off and he gets the full pay for the day. In other words, if a worker does his work in four hours and the work is deemed to be good, he goes home at midday and gets paid for a full day. This holds only when work is running on schedule.

The workers headman is the figure responsible for passing on information to the workers. Whenever there is a "site round" as it was called by the engineer, the headman is always around to be shown the result of workers performance and the contribution it has made towards the timely completion of the project.

The structural engineer does not believe, or as he has put it "has not had cause to believe" that workers are lazy, often dishonest, aimless and dull. He does not measure his success by how quickly and cheaply a particular job is done but he measures success by standard quality and output. He also does not support the idea that workers are secondary to work. He believes that workers should be satisfied before they can be motivated. As a means towards this end, he holds regular meetings with the general foreman, the sites foremen and the headmen to know the wants of the workers as they arise. Among his method of satisfying workers are the payment of leave allowance as well as the permission given to workers to stay on as they wish. Others include the allocation of job which does not over-stretch the ability of a

worker in a day and also the permission of the worker to opt for his choice in either being housed or being paid house allowance.

He also has some emotional involvement with the workers. He is not only concerned about their life at work but entertains any attempt made by a worker to interfere in his personal life.

He even instructs the general foreman to take the workers out on the company's expenses at special times of the year or during festivals.

4.2.3 INTERVIEW - CRAFTSMAN

Interview with a carpenter with the Belag Construction Company. The interview took place at the Kongo Construction Site.

The carpenter claimed to be "happy" with his work and only circumstances that can't he helped will make him leave the work. Asked why this is so, he said that the site engineer treats him like a brother and this was enough for him.

Thirty-two year old man, the carpenter has been in this profession for the past ten years and has worked with the company for one year. He claims to come to work punctually and does his work conscientiously. He also claims that he is always careful in the execution of his duties as he does not want to dissatisfy his manager. He also did not forget to mention the fact that both the site manager and the site engineer were present at the naming ceremony of his baby boy about two months ago, which he really appreciated.

4.2.4 INTERVIEW - LABOURERS

Interview with two men, both working with Belag Construction Company as labourers. The interview took place at the Shika site.

One of them hails from the Eastern part of the country and is a migrant worker employed by this company. He does not hope to stay too long in this part of the country and therefore does not care much about motivation at work. As far as he was concerned, he is "fine" at work presently and there is no condition that is making him uncomfortable.

The other labourer that was interviewed had a bit to say.

Speaking generally for the labourers, he said they liked the way management handles them and they enjoy and look forward to their occasional outing with the general foreman. They regard him as a means towards getting their answers from management and he has never disappointed them. They also prefer to take their house allowance rather than being housed because about two or three of them can share apartments and they get some "change" from their house allowance. They are mostly concerned about money. Asked what conditions make them put in their best when they come to work, he had this to say:

> "We all like to finish quickly so that the rest of the hours remaining for the day can be counted as overtime if work is not left to allocate; not only finish on time but finish

> the job well. Also the foreman goes round from time to time and there is a behaviour card that he fills for management once a month".

On this card, the conduct of each worker is represented and some of these labourers want to attract favourable attention from the management so as to advance to a craftsman's position. Also, the workers, realising that this is a unique company with respect to its style of construction, like to earn a reputation as an effective worker to eliminate as far as possible the chances of being laid off during slack periods.

The workers are also allowed time off to take meals in between work, and these meals are provided by local food sellers on the sites.

They claimed that they had no reason not to work with a full stomach and also knowing that as soon as the job is completed and conforms with standard, there's chance of putting in extra work and claiming extra money. They claimed to work well at all times without strict supervision.

4.2.5 DATA ANALYSIS

The Belag Construction Company, is a relatively new firm and is unique in its style of construction as well as being technologically advanced.

The motivation process of this company has the pattern of job satisfaction being different from job motivation. It is believed here that workers can only be motivated after being satisfied. The company was able to satisfy the

workers and obtain their full co-operation by designing a motivation process which satisfies as well as provides for the motives of the workers. Their main factor of motivation is financial in nature. Among the factors that satisfy these workers are organisational-wide variables such as pay and promotion, immediate work environment such as supervision and co-workers relations and the provision of such facilities as first aid, food and transport.

It can be observed here that satisfaction is of much importance to management.

One of the important factors that motivate workers as has been mentioned is the behaviour of crew foreman and his effect to attract favourable attention from crew men. The foremen in this firm can be regarded as possessing splendid characteristics of attaining high performances from his crew-men and in effect he finds them co-operating with him at most times.

The manager is observed to practise human relations at work and also tries to understand the situation from his workers point of view. This offers inducements to better performance on the workers part.

While trying to satisfy and motivate employees as far as possible, it can also be observed here that this company does not leave room for laxity. The workers are promptly punished on site for acts of non-compliance with expectations and as an exercise of discipline, workers are adequately punished for not being punctual.

To compensate workers who are injured on site, the management has chosen to settle ways with affected individuals directly.

The workers are made to get familiar with job on site and as a means of recognising how their performance fits into the whole picture, the workers headman is allowed to go round while site meetings are held. He then passes on the necessary information and feedback to the workers. Although, there is little chance for workers contribution to meetings held on methods improvement or changes, due to the advancement of the style of construction, they are nevertheless allowed to be represented in such meetings.

The manager does not agree with the scientific management school of motivation.

Although there is a delay on these two construction sites, (Kongo and Shika sites) this delay was not attributed to lack of high performance by the workers. It was attributed to unexpected water logged area on Kongo site and the non-payment from A.B.U. for up to six months which resulted in work on sites almost coming to a stand still. The work also had to be stopped on Kongo site in order to dewarter the area. This unforeseen circumstance, in my opinion, was due to lack of adequate tests on site before the commencement of operations.

However, in this company, there has never been any serious dispute between the management and the workers union.

The Hawthorne studies mentioned in Chapter Two of this study says that workers enjoy being the centre of attraction and that they react positively if management cares about them. The process of motivation in the Belag Construction Company can therefore be said to have the Hawthorne effect. However, it does not agree with one of the findings of Elton Mays and F.J. Roethlisberger (researchers from Harvard) which says that economic incentives are less potent than generally believed in influencing workers to achieve high levels of output.

4.3.1 INVESTIGATION FIRM B

BACKGROUND INFORMATION

Firm B, which is registered under the name of New Nigeria Construction Company (N.N.C.C.) is a branch of New Nigeria Development Corporation. The NNCC is jointly owned by NNDC (60%) and Santom (40%) a Fremch company. The NNCC was formed in 1973.

The Ahmadu Bello University Teaching Hospital project came in 1977 and it is the first major project handled by this company which was at that time run by the French.

The project was poorly managed by the French between 1977 and 1979. The main causes being the fact that the drawings and designs were dimensioned in imperial and the specifications and other necessary documents were written in English. The French understood metric and only one of them could speak a little bit of English.

The NNDC dissolved the French management and expatriates were brought from Britain to replace them. This British management took over the project in May 1979 although the French still retain their 40% share and they are still represented on the Board of Directors.

Due to poor management and lack of technical co-ordination which the project had suffered initially, remedial work has to be carried out worth ₦0.7m. Presently, apart from this project, the company has three others namely the University of Ilorin Teaching Hospital, the New Nigeria Investment Limited and the NNPC staff quarters, in Kaduna. The company has however tendered for the University of Sokoto Teaching Hospital project.

This company started with the initial labour force of four hundred men, attained the peak of seven hundred men and presently in capacity of five hundred men. Labour is usually available locally, this refers to skilled and unskilled. When labour on site exceeds the jobs to be executed, the labourers are retrenched.

Training facilities took the form of on the site, training only.

The workers are daily paid, based on eight hour working day. Salary is obtained at the head office in Kaduna on the 25th of every month.

Promotion is by hardwork and duration of service. This is not applicable to labourers anyway. There is an existence of a labour union on site which is a branch of the

labour union for the company. However, it does not participate in negotiating salary adjustment for the workers.

According to the site manager, transport is provided for the workers and they are picked up at particular points in the mornings to ensure punctuality. This service is rendered to the workers free of charge. The workers are, at the same time, paid transport allowance. There are work cards possessed by each worker. As soon as a worker comes on site in the morning, he drops his card with the clerk in the accounts office. The cards are collected at 7.15 a.m. (after which a worker is sent back home) to register those who are present for the day. A worker is given fifteen minutes of grace after which he is held as having come late for work. The worker is either allowed to register for the day or sent back home, depending on his conduct and at the discretion of the workers sectional supervisor.

The overtime system on this site is as follows:

Week days	-	Hourly pay times 1
Saturdays	-	Hourly pay times $1\frac{1}{2}$
Sundays and Public holidays	-	Hourly pay times 2

The normal working hours being 7.00 a.m. - 4.00 p.m. with a lunch break of 1 hour from 12.00 p.m. - 1.00 p.m.

Workers are also allowed to work during lunch break as overtime. The overtime is a continuous system here on this site as the work is badly behind schedule.

As a form of holiday, the site is completely closed down from December 18th - January 5th every year. This serves as the total holiday given to the foreman and all the workers below this level in a year. The Nigerians above this level are however allowed additional four weeks leave during the year while their expatriates counterpart go on leave twice a year for four weeks each time. All workers are however paid holiday allowance.

As a welfare facility, the site is provided with a clinic with a resident nurse that is on duty eight hours a day for five days and a doctor that calls in on Tuesdays and Thursdays. This medical services are rendered free to workers. Canteens are also built on the sites and private food sellers run these canteens on individual basis. In addition to these welfare facilities already mentioned, all workers are insured. Injuries on site are settled by the company's insurance agents on the basis of a medical report and all hospital bills are paid by the company.

The A.B.U. is represented on the site by an architect from the Estate Department but the designers architects are not represented on site.

4.3.2 INTERVIEW - MANAGER

Interview with a site Engineer, with the New Nigeria Construction Company. Interview took place on the Teaching Hospital Site.

The manager claimed that the main processes that has been used for motivating the workers is financial in nature. This is mostly in terms of overtime payment.

Workers are allowed to fill overtime sheets which he signs and they claim in addition to their salaries. He complained anyway, that workers are in the habit of giving false information about the number of hours put in. When asked whether it has worked well, he had this to say:

> "It is very difficult to see the result of these expenses being made on the workers as the work progress on this site is upside down."

He admitted the fact that workers usually complain both about the working conditions and about the work itself. According to him, he has very little power to do much because the orders come from the head office. He also admitted the fact that their present process of motivating employees has not been very effective. The efforts to make it more effective now will yield very little result because of the present state of the site. Much attention is paid to the work itself now.

He claims that the productivity that is experienced on the site does not match the expenses. This, he attributed to lack of good management.

He complained about the difficulties encountered in making changes or making decisions. He made mention of one

particular polish architect that came from the designers office after about six months of request. He was asked to take the architect round to show him some areas that needed attention. As he was taking the man round the site and was calling his attention to these areas, the man just stopped suddenly and complained that the engineer was walking too fast and that he (the architect) had a weak heart. This was how the man left the site and up till the time of this interview, nothing has been communicated to the site from the designers. This happened about four months ago. In the engineer's opinion, an attempt or efforts should be made towards potential realization of Nigerian workers rather than recruiting labour from outside the country. He also had this to say:

"The expatriate has come to make money;
he does not care to work."

Asked whether he understands the emotions of his workers, he claimed he practices a bit of human relations. He has also noticed that this can motivate the labourers but not the foremen. They want their needs to be met by management not by an individual site engineer.

There have also been serious cases of theft reported on this site. There was a story of a project manager (whose name was withheld) who used the company's trucks to carry cement to his private shop in town for sale. The manager was however dismissed. There was also the story of a carpenter who was caught with three of the company's power driven

drills on his way out of site. He too was dismissed immediately.

The manager does not believe that workers are lazy, but is of the opinion that they are often dishonst. He also believes in very close supervision.

4.3.3 INTERVIEW - FOREMEN (SHIKA SITE)

Interview with two men, both working with the New Nigerian Construction Company as foremen. The interview took place on the Teaching Hospital Site, Shika.

Both of them claimed to have been with the company for five years and have the crew of 54 and 30 men respectively under their direct supervision. The crews include carpenters, masons and labourers for both of them.

One of them claimed to be happy doing his work because it is what he has been trained to do, while the other felt indifferent about it. Both of them, however, shared the same view about their feeling towards the project.

Their main complaint was lack of recognition by management. The extent of their responsibility is very narrow as they always have to ask for permission every now and then. The only thing they have the "power" to do is to allocate work to the labourers.

The main problem as claimed by one of them is that whenever he asked for decision on any aspect from his immediate boss who is a Sectional Supervisor, he couldn't get a direct, straight forward answer. The Supervisor in turn had to ask the site engineer or the project manager.

An answer might not even come in the next three weeks. In most cases, he had to move the labourers from that particular job to another. Among such decisions that they have to wait for are design decisions both structural and architectural.

Another factor that frustrates these men is the fact that despite their efforts to be productive while waiting for decisions to be made, the non-completion or loss of time encountered on the abandoned work is still blamed on them. They have also found out that when eventually these decisions are made, they are usually not far out from what the foremen had suggested initially.

Another factor the men complained about is due to the change in management. Due to this change, there has been a lot of alterations too on the sites. The foremen complained of having to use efforts and time in putting in and taking out the same structure and then going back to put it in again. One of them confessed that wherever they are asked to re-construct such an area, he is much less eager to work.

The foremen also mentioned having to wait for the delivery of materials and lack of adequate tools and equip-ments.

Both men accepted the fact that they are paid well, however they are still bitter because management has refused to meet some of their needs. These include the approval of car loan and also the approval of extra holidays. The men claimed that they are not paid transport allowance and they are not carried on the company's bus because they are enti-tled to car loan. But they have been deprived of this

entitlement. These men also complained about the humiliating action of searching them whenever anything was reported as missing on site. They had to strip to be searched and they consider this as being bad. "We are heads of our individual families and we cannot steal. Anything bad on this site is attributed to us." This statement was sadly made one of them.

The foremen admitted that their chance goes a long way in planning the work of their crew, but many factors affect the plan to ruin it. It has never worked out nicely.

4.3.4 INTERVIEW - FOREMAN (ILORIN SITE)

The Crafts supervised by the men include carpenters, masons and labourers. The size of the crew for each man ranges between twenty-eight and thirty-seven men. Two of the men had stayed with company for about five years, one man for three and half years and the two others for four years. Two men were moved from Shika site to Ilorin while two others came from two different sites in Kaduna and the fifth one came from the site in Zaria City.

Asked how they felt about the job, 60% of the men complained of boredom. The site took off about nine months ago and for almost six months no substantial output emerged. This was largely due to incomplete information concerning drawings and designs and also the distance between the site and the head office where all decisions must come from.

All the men agreed that they don't feel important to the project and that since work is not in full force, the job

is not interesting to them.

Their responsibility includes the allocation of job to crew men and the supervision of this work to ensure standard performance. They don't have much to contribute as the decisions come from the head office.

Lack of adequate tools, materials and the long wait for decisions to be made are the most significant complaints about this project. The men also complained about frequent change of their managerial staff which also affects continuity of work.

4.3.5 INTERVIEW - LABOURERS

This set of workers admitted to be happy because they get paid but exhibited dissatisfaction in the way they get paid. As has been mentioned earlier on, payment is supposed to be on the 25th every month.

The payroll is prepared in the head office at Kaduna and the paymaster brings the money to site to pay the labourers. This usually exceeds the 25th. If the paymaster does not show up on the 25th, there is nothing the labourers can do except keep on expecting him. Usually by this time of the month, some of them don't even have enough money to get to the site, eat a good meal and get back home at the end of the day.

They also do not like the pretence act of looking busy that they have to put on whenever they are awaiting direction from the foremen. This they had to do to avoid being

reprimanded by the site engineer on his site rounds.

The workers also mentioned the fact that whatever was wrong with the project wouldn't affect them much for as long as they are paid more money, they would work without complaints. Asked how much more they are expecting to be given, they didn't give a specific answer.

At present, they are paid ₦4.61k/day.

4.3.6 ANALYSIS OF INVESTIGATION

The New Nigerian Construction company; Ahmadu Bello Teaching Hospital site, Zaria.

Financial incentive has been applied on this site as a means of motivating workers to higher level of productivity without much success.

It was obvious that management has not identified the motivational factors in the workers' job assignment that produce higher level of performance. This was apparent from the continuous complaints on the side of the workers and lack of management to meet their needs.

The workers could not see the result of their effort and how it fits it and they do not get feedback on their performance. They believe they are secondary to the work.

The situation on this site agrees with the findings of the Harvard researchers which implies that economic incentives are less potent than generally believed and that leadership practises influence employee satisfaction.

It should also be noted here that desire alone is not enough to produce performance and satisfaction, there has to be appropriate tools, lack of which exists primarily on this site to de-motivate the workers.

This site has shown a total lack of co-ordination and poor authority delegation which has resulted in poor management and also escalated cost and completion time of this project.

It will be noted that Adam Smith theory of motivation exists on this site. It is financially oriented. Also from the interview with the foremen, it will be recalled that the workers want which will gear them to higher productivity agree mostly with Herzberg's motivational factors.

Work is badly behind scheduled on this site and the company is actually, presently operating at a loss on this particular project. This, as mentioned earlier, was due primarily to poor management from the outset. As at the time of the interview, despite the change of management work is still not progressing as it should. Management has failed to give attention to human factors affecting productivity such as motivation. Management has regarded workers to be a small element within the organisation.

Sadly, there were some contradicting statements made by the site Engineer. If he claims to believe in close supervision which is practiscd on the site, there should be no reason why a worker should apply for overtime claim which he hasn't worked for. It only shows that the workers

are not supervised and can always claim for hours which were not even spent on site.

This lack of supervision is also apparent in the fact that some of the re-work done on the site were due to distortion of information and lack of supervision.

No outside training for workers was made mention of, no induction course, no form of formal introduction and no type of safety course was mentioned.

Some of the conditions that were present on site to satisfy the employees include food canteens, welfare clinic and good salary. The claim of the site engineer that transport is provided for workers was disputed by the workers.

Some of the workers claimed not to be affected by the management's attitude towards them but most of them claimed to be less eager to work and they are absent at the least excuse they have to be.

The labourers are not motivated by the attitude of the foreman, according to the labourers headman, their own foreman shows no interest in the work and they also follow his direction only.

There is no desire shown of any crewman to attract favourable attention to advance to the position of foreman seem they don't seem to attach any stigma to being laid off. They showed not much happiness in their work. The system of payment at this site acts as a demotivator for the workers. Workers, especially the labourers, work primarily to get paid.

When this is not done promptly, the whole motive behind their working is defeated. When a worker cannot even satisfy a need such as getting fed, then the continued existence of such a need will not only dissatisfy a worker, it will demotivate and could also act as a physical disturbance to performance at work. In addition, the site manager has expressed his lack of support in this system of payment. Apart from the fact that the workers are affected, whenever their pay does not come on the 25th, they down tools and continue to queue up for payment. Just last month, the management had to pay six hours overtime on 25th which was a Friday and also two hours on the 26th which was Saturday just for the workers to get paid.

The purchasing unit is situated at the head office in Kaduna and it controls all purchasing and distribution of materials to the site.

At the Ilorin site, the frequent change of staff at higher management levels was also a source of dissatisfaction to the workers. Since the beginning of the project, the Ilorin site has had four different project managers. This adds to the fact claimed by the site manager at Shika that the expatriates do not have the interest of work in mind.

4.4.1 INVESTIGATION - FIRM C

BACKGROUND INFORMATION

The firm is registered under the name L. D'Alberto & Co. Ltd. Building and Civil Engineering Contractors.

289995

The company which came into existence about thirteen years ago started with a labour force of one hundred and fifty men. The company, is registered with the Federal Government Tender Board in Category D. The Board of Directors is made up of six men, three expatriates and three indegenes. The company had completed a total of nineteen projects in the last three years and is currently executing another sixteen projects. The range of the value of the current contracts is between ₦22.6m and ₦0.3m. The company has also tendered for three new projects.

Labour is usually available in the location of the project and migrant labour is also employed. Whenever work is nearing its completion, labourers are always re-trenched and reputable craftsmen are moved to other sites.

Training takes the form of on the job-type for the labourers but the craftsmen are sponsored on a proficiency refreshers course at the Yaba Trade Centre, Lagos. The course lasts for three months and an average of eight men are admitted at a time. Selection of men in the firm depends on length of services, conduct and ability of workers.

Workers are paid on daily basis and payment is made on the last day of the month. The foremen and employees in the management cadre have their payment made into the individuals account.

The payment of the overtime services put in by the workers are paid as follows:

Weekday (up till 10.30 p.m.) - Hourly pay x 1½

Weekday (10.30 p.m. till starting time in the morning - Hourly pay x 2

Weekend + Public holidays - Hourly pay x 2.

Apart from the expatriates and the members of the board of directors who are housed, all other employees are paid housing allowance. The project managers on sites outside Ibadan are also housed.

The workers are "checked in" onto the site by a "clock-in" system. There are three of the special type of clock in the card office. As soon as each worker comes in early in the morning, he takes his card from the card board and pushes it into a space that is provided at the top of the clock. The time at that particular moment is then printed onto the card and the card is then put back into the card board. A clerk is in charge of the clock room and the place is locked up by 7.15 a.m. when a worker is held to be late for work. If a worker comes late, at the discretion of his sectional head, he may either be asked to go back homr or be permitted to clock in, in which case he is only paid for the number of hours put in. The company is registered with the Blue Cross Hospital, Kongi, where workers and immediate members of their families are treated at the company's expense. In addition to this, the sites are provided with first aid boxes and any illness that cannot be handled on site is sent to the company's hospital.

Any accident occuring on site that results in an injured or disabled worker is a matter taken up and settled between the company's legal aid section and the insurance company. The worker affected is compensated.

The company holds induction courses quarterly, to introduce newly employed workers to the systems of the company. These courses are conducted at the head office.

In terms of holidays, labourers and tradesmen are entitled to two weeks/annum, the foremen three weeks/annum while the managers and the expatriates take four weeks/annum. In addition to this, the sites and the offices are closed down for 10 days during the Christmas and the new year celebrations. Every worker is also paid holiday allowance.

4.4.2 INTERVIEW - MANAGER

Interview with the business manager for L. D'Alberto and Co. Ltd., building and engineering contractors. The interview was held at the head office, Lagos bye pass, Ibadan.

The factors that motivate workers in this company are not stable and are not rigidly adhered to. According to the business manager, the factors are reviewed from time to time as the employees needs arise.

Over the years, the labourers' activities and attitudes on site have been observed to be adversely affected by financial factors. Their factor of motivation therefore,

has been fairly constant and this is also financial in nature. They are permitted to work overtime, if need be, and are paid accordingly. Just recently they started being paid twice a month, on the 15th and 30th of each month. This was granted as a request made by the labourers through their representative. The Management viewed this as a motivator because it gives the labourers the opportunity to provide for their immediate needs as they arise. It will also serve as a form of self financial control for the workers.

Factors used in motivating foremen include the recognition of their technological know how and delegation of responsibility to this effect. They are also allowed to plan the work of their crew men and also allocate work at their discretion to accomplish these plans.

Another source of encouragement towards better performance given to the tradesmen is the provision made by the company to send workers of different trades on a refresher course, a programme made available by the Government Trade Centre. Workers strive to attract favourable attention to be chosen and this can only be done through hard work and good behaviour as these are the main determinants governing the choice of workers. The labour force for this set of workers has also been fairly constant since length of service is another criteria for being chosen.

He, does not believe that financial incentive is the only answer to motivation but says that workers could be

lazy if they are not satisfied.

He has no emotional involvement with the workers since, as he claims, there are not many of them. He believes in very close supervision of workers so as to ensure quality work and also to extract the maximum effort from them.

He also mentioned that on one particular site, the theft reports have been too regular that it has drawn considerable attention of the management.

4.4.3 INTERVIEW - WORKERS

Summary of information compiled from questionnaires filled by foremen and interview with craftsmen and labourers working with L. D'Alberto and Co. Ltd. The foremen are from the University of Ibadan New Central Mosque Site and University of Ibadan Undergraduates Hall of Residence (men) Site. Both sites are located within the University Campus.

General Information: The Undergraduates Hall of Residence, a ₦4.2m naira contract was 60% completed while the Central Mosque worth ₦2.8m was 30% completed as at April 1981. Both projects belong to the University of Ibadan Council. The Hall of residence project was behind schedule, the reason largely due to lack of materials and changes in the design. The Central mosque was however still running on schedule.

The crafts supervised by these men include carpenters, masons, electricians, plumbers, welder, glaziers and labourers. Number of people supervised range between twenty

eight and sixty three workers. Their main complaint was the complication of their responsibility. They are not allowed to take part in the weekly programme which is prepared by the sectional head but they are expected to conform with it and complete the work according to plan. This is difficult for them and they strongly feel that the weekly programme should either be their responsibility or they should be allowed to participate in it.

Since they were not participating in the weekly plans breakdown, it turns out difficult for them to control the programme. Matters usually arise which have to be decided on and these call for questions which go a long way to be answered. Communication with management is not straight forward.

As these plans are being made for them, these men claimed that they don't attack the work with the same urgency and effect as they would if the plans had been their own ideas.

They also complained about having to re-do some work due to lack of adequate supervision both on the side of the clients, structural engineers and the architects representative.

The men also complained about the excessive paperwork in the requisitioning process for materials. They expressed much discontent over the difficulties experienced when trying to obtain proper signatures to make a requisition

official. Apparently, it was a frequent problem for many of the foremen to locate the appropriate authorities on the site to get signatures for approval of a requisition.

On the Central Mosque site, the foremen complained of overcrowding on the work site. Overcrowded working conditions were mentioned as due to space occupied by plants and also due to high density of workers in one area. The men also complained about the engineers who inspect work on site. They complained about the engineers' lack of working knowledge or experience and the requirement by these engineers that the foremen should comply completely with specifications when these degrees of accuracy are almost impossible to achieve in reality.

In addition, these foremen want to be recognised by management for their knowledge and experience.

Labourers and tradesmen complain of being overstretched by the foremen in terms of daily work allocation. The tradesmen complained of being rushed to complete specific tasks for reasons they could not understand. Some also complained of friendship being the major factor in advancing for courses.

4.4.4 ANALYSIS

Foremen did not agree with the business manager on the point of the recognition of their technological know-how. The fact that workers were not allowed to participate or make suggestions towards decision making has adverse effect

on their attitude towards work. The long wait for decisions and also the long process encountered in acquisition of materials and lack of adequate tools lower the workers productivity. Work discontinuity due to decision which the workers feel they are capable of making was viewed as demoralizing by the workers. Workers want to direct and control their own commitments. Most of workers needs agree with Douglas McGregor's theory Y.

Inadequate field support on the part of the clients engineers and architects delays inspections and leads to rework at times. This was viewed as being discouraging by the workers.

The foremen over stretching the labourers and the tradesmen by his workload allocation was primarily due to his efforts in complying with plans he did not participate in making.

The tradesmen disputed the fact claimed by the business manager that the choice of advancement for course depended largely on years of service and experience. On the other hand, they believed it was dependent on friendship and favouritism.

Management has developed ways of motivating workers without trying to understand motivation from the workers point of view. Inadequate supervision and lack of the recognition of workers ability has adversely affected productivity. Workers do not tackle their work with urgency and as much interest as they would have done if they had the

chance to help plan and control their activities and also if suggestions are welcomed from them towards decision making.

4.5 INVESTIGATION - FIRM D

4.5.1 BACKGROUND INFORMATION

The firm which was registered under the name of Mebong Construction Company has its head office in Benin Capital of Bendel State.

The firm was established in 1977 with an initial labour force of seventy-five men. Labour force at the time of interview was two hundred and twenty-two. Source of labour included the locality and also migrant labour from the East and West part of the country.

The company is currently executing two projects namely Ditalink pharmaceutical factory and Centre for Cultural Studies, Benin.

Both skilled and unskilled labour are employed locally and whenever labour is in excess on the sites they are promptly retrenched. The only source of training is on the job type and wage rate for workers is determined by qualification and output.

An average labourer is paid ₦4.00 k/day while a tradesman is paid between ₦4.50/day - ₦4.75/day depending on the class of his certificate which ranges from Grade I to Grade 3. Working hours are from 7.30 a.m. - 4.30 p.m., with one hour of 12.30 - 1.30 p.m., for lunch. Payment of salary is calculated on a daily basis and is usually on the last day of

the month. Overtime is allowed to be put in by workers if work is deemed to be late and this is paid as time and a half on Weekday and double time on weedends and Public holidays.

This figure shows the overtime sheet arrangement for this firm.

Overtime Sheet

Name ..... Job Title .....

Working hours ..... To ..... Total No. of hours.....

Date	Overtime From To	No. of Hours	Rate Per Hour	Total Amount	Nature of Duty	Signature of officer authorizing overtime
Total Amount						

Date ____ Signature of Site Engineer

Date ____ Approval

In form of annual leave, labourers are entitled to one week/annum while craftsmen are entitled to two weeks/annum with a leave allowance of ₦10 and ₦15 respectively. A foreman is however entitled to three weeks/annum. In addition to this all staff go on holidays for one week for Christmas and New Year celebrations.

During his holiday, a worker may choose to stay back and work on site. He will however be paid his leave allowance and he will also earn his salary normally as per number of hours he puts in.

Workers are paid transport allowance and in addition to this, a company lorry is made available to convey the labourers and the craftsmen to site and a company bus is also available for the foremen. This is to ensure punctuality in the mornings. Workers are however not conveyed back home at the end of the day. Each worker is expected to find his way. A time keeper is made available on each site to mark the workers "in" at the beginning of each day. He also records the number of hours put in by every worker. There is no hard and fast rule attached to lateness.

Accommodation is not provided for the workers, they are however paid housing allowance.

A first aid box is made available in the clerks office and a clerk is made responsible for treating minor injuries and illnesses. Toilet facilities are also provided on the site and food sellers are allowed in to cater for the workers.

The workers, however, have to eat out of their own purses.

No specific form of safety course technique was mentioned, workers are, however, given informal talks on the sites by the supervisors to exercise care and be cautious in the execution of their duties. No protectice clothing is given to the workers on site.

4.5.2 INTERVIEW - MANAGER

Interview with Manager, working with Mebong Construction Company. The interview took place at the firm's head office in Benin.

He claims that the company has no specific process for motivating employees. "We cannot treat them like machines, we try to meet their needs as they arise". He mentioned the fact that motivation comes from within, therefore, the workers are motivated to suit the conditions of the work situation and also that of the workers.

In his opinion, a satisfied worker, is a productive worker. If workers are satisfied they will go about their duties without complaint. However, he claims that despite the management's effort to satisfy the workers, they still complain. Management does not bother to meet some of the demands anyway because these demands are not considered to be of immediate necessity for the workers. Asked how management decides what needs are of immediate necessity and what needs are not, he said this is determined solely by management.

In his opinion, such facilities as transportation of employees to work, medical attention given on site and also the enjoyment of Christmas holidays are regarded as sources of satisfaction to the workers.

The manager does not support, as such, the process of using financial incentive as a means of motivating employees. According to him, financial incentive will only indulge the workers and will not necessarily motivate them, in effect expenses will not match the output of these workers.

He claimed "we are not emotionally involved with the workers but we are diplomatic in dealing with them". Asked whether their system of diplomacy has been effective, he said that they have no reason to complain, none of their two projects is badly behind schedule, the only unhappy thing is that the workers do not stay in employment for long. In trying to find out whether this was due to the way they are treated, the manager claims this happens throughout the construction industry and that the management of this particular company does not complain as labour is readily available.

4.5.3 INTERVIEW - WORKERS

Findings from workers group interview, on Ditalink Pharmaceutical factory site. Workers included one foreman, one carpenter and two labourers all employees of Mebong Construction Company, Benin.

The foreman interviewed was one of the two in charge of the Ditalink site, the other foreman was not available at

the time of the interview.

Crafts supervised by him included carpenters, plumbers, painters and labourers. Altogether, he supervises a crew of fifty eight men. This foreman has been in the service of the company for about two years.

The foreman complained of having a difficult time achieving a lot of work through the workers. The workers were usually not eager to work.

He is responsible for planning the work for his own section of the site and he is also responsible for allocating work to the workers and also for ensuring that the work is executed according to plan. According to him, some conditions of work on this site exist to dissatisfy the workers but which management has not bothered to take actions to correct. He claim that the purpose of his existence is to get the work done according to specifications through the workers but that if workers are not happy about their work, he is greatly affected too. He agreed that management permits him to make suggestions but in most cases do not implement these suggestions. He claims to be frustrated by the role of a middleman who is being stretched both ways.

He is of the opinion that if management could make some effort in listening to the complaints of the workers, things would be lots better on the sites. He believes that no amount of force or threat could make an unhappy worker effective on his job. The workers do not produce according to plan and they often make mistakes. Most of them are

absent and they take excuses to go off site at the slightest chance. This foreman has attributed all these to lack of satisfaction on the part of these workers. Asked about his own feelings, he claimed that the satisfaction and performance of his crew is his own satisfaction on the site.

The workers interviewed spoke representatively on behalf of the rest of them. They agreed to working primarily to get fed and also to provide for their immediate needs. Most of them whose length of service ranged between twenty five months and two months claimed that they would leave the company as soon as the opportunity comes.

First on the list of their grievances is the fact that their wage rates are low compared to their counterpart working with other companies in the locality. Management has promised but at the time of this interview, the case had not been looked into.

Another factor that operates primarily to discourage the workers is the fact that management claims to provide them with transport, which in reality is not so. The lorry is either out of service or there is no driver to operate it. Workers claimed to find their way to the sites on their own purses.

The labourers complained about lack of permission on the part of management to allow them undertake apprenticeship on the sites with the tradesmen. According to them, most of their counterparts on other sites do this and are only withheld to serve the company for one year.

They claim to be over-stretched by work and whenever work which was allocated to them could not be finished during normal working hours, they are compelled to work overtime without payment. They also complained about managements harrassment and strict punctuality over resumption from lunch break. The workers complained that only two food sellers were permitted to sell food on the site and it takes a long queue during lunch hour to buy food. Management even went as far as deducting the extra time it took a worker to resume after lunch hour from his pay hours. This is regarded as being frustrating to the workers as they couldn't even relax to take their meals. "A hungry man is an angry man" they claimed and without food, they wouldn't have the strength to perform well. The workers also want a standard clinic to be established on the site and complained about the present first aid box which contained virtually no medicines. They also want to enjoy free medical facilities as the employees in the management cadre.

4.5.4 ANALYSIS

Management of this company claimed to apply motivation factors to workers according to workers needs and work condition and contrary to this and according to the manager, management has the sole responsibility of deciding which, of the workers needs are of immediate necessity. Workers on this site are viewed to fall in the category of disgruntled uninvolved workers. They work under stress.

They also dislike the management they work for but only work just to get paid and this pay happens to be inadequate. The workers have appealed to this effect but no effort has been made by management to review their case.

The foreman is unable to perform his task well because his crew men are not satisfied with their jobs. Decision is centralised and management treats workers as being secondary to the work.

Workers are made to put in extra hours without payment, the reason on the part of management being that the work should have been finished under normal working hours if workers had put in their best.
Management expects better performance from workers without bothering to satisfy or motivate them accordingly. This shows that management acts in contrary to the statement of the manager which say that "we cannot treat them like machines".

Labour was observed to be unstable and there is a high rate of workers absenteeism. Low performance and bad quality work are all results of dissatisfaction experienced by these workers.

The workers are unsuccessfully deceived by the presence of a first aid box and are deprived of their right to free medical facility.

No form of induction course exists in this company and in addition, there are no training facilities nor is there a safety course.

Contrary to the statement made by the manager, the foreman claimed that work was badly behind schedule and in his own opinion, it was due primarily to low performance on the part of workers.

4.6 INVESTIGATION FIRM E.

4.6.1 BACKGROUND INFORMATION.

The company, E. Michelletti was established in 1930. With the headquarters situated in Enugu, in the Anambra State, the company has about ten branch offices in different parts of the country. The company has undertaken several large projects around Zaria and is currently executing three among which is the faculty of human medicine for A.B.U. situated at the main campus of the university. Most of the current projects are near completion and the company is expecting more projects by the end of the year.

Labour is usually available locally and both skilled and unskilled labour is employed according to project availability. Whenever any project is nearing completion, labour is usually retrenched with the labourers being paid seven days salary in lieu of notice.

Wages are paid on daily rates of ₦4.61 for labourers and ₦4.74 for craftsmen. Also labourers are paid ₦10 as housing allowance and ₦10 as transport allowance while craftsmen receive ₦10 for housing and ₦15 for transport allowance.

Training takes the form of on the site type. A labourer, considering his length of service, competence and conduct, is appointed as an apprentice to a tradesman, depending on his choice of trade. He learns this trade for a period of two years after which he becomes well informed and is allocated work and rated as a tradesman.

At the discretion of the manager, overtime can be put in by the workers and is paid at a flat rate of twice time on ordinary day, weekend and also on public holiday.

The site is closed for two weeks at Christmas during which all labourers, craftsmen and foremen are supposed to take their leave. Employees in the management cadre must take these two weeks and take the additional entitlement any other time of the year.

Labourers and craftsmen are paid for six days out of these two weeks as leave allowance and in addition, every worker is paid ₦10 as Christmas bonus. A foreman is paid about fifteen days for leave allowance and ₦20 as Christmas bonus depending on length of service.
Permanent staff however are paid throughout the length of their holidays.

A foreman can apply to become a permanent staff considering his length of service. A disadvantage attached to this is the fact that, when work is behind schedule, the permanent staff have to work overtime without being paid.

There are foodsellers on this site to cater for the

needs of workers during break. Workers however have to eat out of their purses. Toilet facilities are available as well as a first aid box which is operated by the site clerk. Serious injuries or accidents have to be taken to government hospitals and the company is responsible for the bills. The worker is also paid his normal salary throughout his period of treatment.

4.6.2 INTERVIEW - FOREMAN

Interview with a foreman, working with the E. Michelleti. The interview took place on the faculty of human medicine site.

The foreman was employed as a site clerk in 1970 with a salary of six shillings a day and is now a foreman who is entitled to become a permanent staff. He has however declined this entitlement as he so much depends on his overtime payment. This he will no more enjoy as a permanent staff.

He claims to be the only foreman in charge of the human medicine site and that most of the workers have been retrenched due to the near completion stage of the project. Only workers with long services are retained and they consider themselves lucky for this.

Most of the workers are happy with their job and also with management but they claim they would be happier still if management could give better attention to numbers of years of service in this company. Apart from the

coverage from being laid off during slack time, workers want substantial increment to match their years of services.

Workers would also like management to give adequate attention to various reports of theft on this site. They claim that the security on the sites should be tightened, rather than management blaming the theft on workers.

The foreman also complained about the distruption of his work plans by the designers and also the manager of the project himself. These people usually divert workers away from their daily work allocation thereby causing constant movement from job to job, inability to conform with plans and also a bit of re-work. The workers also want more work as they do not like being idle.

Most of the workers are however happy with the company and even those who were retrenched have been calling to check for availability of appointments.

4.6.3 ANALYSIS

Although the project manager was not available for interview, the results of the interview with the foreman and some workers show that workers are satisfied and also motivated on this site. No report of major dispute was mentioned and with the implementation of the suggestions of the workers, this company will no doubt enjoy the full co-operation of its workers.

The report here shows that workers are not aimless, neither are they idle and although financial incentive

goes a long way to motivate workers, it is however not the only factor that influence their productivity.

Although the work has been reported as being late, it was not attributed to low performance from the workers. Work had to be suspended on the site for an appreciable period of time due to lack of funds from the Federal Government.

No form of induction course was mentioned and no safety course is available for workers on this site.

4.7 GENERAL ANALYSIS

The preliminary analysis made for each of the firms has summarized the major factors affecting workers satisfaction and production on the site. This general analysis will now go a step further to examine each factor and the situation resulting from the effect of the factors.

4.7.1 TABLE OF DEMOTIVATORS

Table showing demotivators influencing workers performance on job sites is shown overleaf.

Rating 1 - extremely important

2 - very important

3 - important

	A	B	C	D	E
Inadequate medical facilities				3	
Inadequate pay		1	1	1	2
Workers viewed as being secondary to work				2	
No training facilities		2		3	3
Harrassment over resumption from lunch break				3	
Foreman's suggestion disregarded		2	2	1	
Inability of foreman to get work done through workers		1	1	1	
Overtime without payment				1	
Inadequate attention to length of service		2			1
Not enough work					1

	B	C	D	E
Excessive travel to site	3			
Strip down searches	3			
Little feeling of company membership	2			
Re-work	1	1		2
Additional Holiday	3			
Absence of car loan	2			
Long wait for changes to be made	1	1		
Impractical to perform to schedule due to problems	1	1	1	
Frequent wait for materials and tools	2		2	
Theft	3			3
Constantly moving from one job to another	1		2	
Lack of participation in weekly plan		1	2	
(Blame for) little accomplishment	1	1	1	2
Excessive paperwork in ordering of materials		1		
Overcrowded site	2	3		
Requirement of complete compliance with specifications		2		2

4.7.2 EFFECT OF DEMOTIVATORS.

Decision Making:- Waiting for decisions was the type of unproductive time most frequently described by foremen. On four of the sites, the foremen mentioned having to wait for decisions on one job or the other before they could proceed. Usually the decisions for which they had to wait included design decisions both architectural and structural. Also, it was mostly mentioned that there was an inadequate field support of designers which led to decisions going a long way before they could be made. Waiting has proved to be very unproductive and has definitely acted in most cases to frustrate workers.

This major factor can be viewed as a key point giving rise to many other sources of demotivating factors.

Example is the lack of ability of workers to perform to schedule. If decisions go a long way to be made and questions are delayed to be answered, the best the workers could do would be to abandon the job under execution and move to another job. Working from job to job or working around the parts of the job where they were waiting for decisions may sound reasonably productive but the workers reported that it reduces productivity and frustrates them.

Thus, this lack of management, supervisory and engineering support of the workers' basic requirements to perform the work is why productivity is low and much

time is lost. On most of these sites, questions have to get to the head office before answers can be obtained and suggestions from the lower level work force are often treated with ignominy.

Much of this problem of waiting which leads to movement from work to work and causes inability to perform to time, can be solved if decentralization is applied to the company's organisation structure.

A decentralized organisation permits more decisions by lower-level managers. If all decisions were reserved for the top level managers, the scale of operations would be significantly restricted. An organisation should try and take the risk of decentralization in order to increase growth and success opportunities. Management should have means for objectively evaluating and controlling the performance of the lower-level managers and permit decision making in those managers who possess demonstrated judgement, confidence in themselves and a drive to exist unsupported.

If this system occurs in an organisation, questions will not go further than the sites to get answered and with an adequate field support on behalf of the designers both architectural and structural, both drawing and design questions will promptly receive attention. This will reduce considerably the amount of time lost in waiting, the frustrating idea of moving from job to job and the inability to perform to schedule.

Another most frequently mentioned motivation and productivity problem was re-work. Re-work is regarded to be highly demoralizing to the workers. The foremen claimed that when workers construct and are asked to remove the same structure, they always demonstrate dissatisfaction and they are always less eager to work when they are asked to begin again. The foreman's descriptions of re-work were strongly negative. Similar effects of re-work resulted from the craftsmen and labourers. The workers stressed their loss of spirit and resulting unwillingness in their work due to re-work. Re-work is a powerful demotivator, once it became clear to the workers that the efforts they are putting in may all have to be taken out, it becomes hard to get any job done right.

The majority of discontent with respect to work re-done was when it could be blamed on poor management as a result of mis-instructions and a result of mis-interpretation of plans and specifications. This was specifically stressed on the A.B.U. Teaching hospital site at Shika.

The work re-done on this site has direct effect on the stage of completion and escalated costs of the project. Carpenters complained of having to fix and remove a large number of doors because these doors were non firo-resisting and therefore do not conform to specification.

The greatest amount of work re-done was attributed to the poor quality of engineering drawings, incomplete

drawings coupled with errors and inconsistencies, lack of supervision or untimely inspection, change orders and sub-standard workmanship. Re-work is directly responsible for lack of or little accomplishment which is another demotivator mentioned.

Steps in eliminating this negative factor of motivation should include the intimate knowledge of both architectural and structural drawings by the project manager and his assistant. More care should also be exercised in making these drawings and the field support team will also help a great deal in getting quick solutions to problems of confusion as soon as they arise. Close supervision on the part of the site engineers and the supervisors will reduce low quality and substandard workmanship. Another factor mentioned by the foremen that acts primarily to dissatisfy them and contributes directly to their inability to meet schedule is their lack of participation in the programmes. The weekly plans are made without their knowledge and they are expected to allocate work to the workers and conform with the schedule. It might be useful to analyze at this point what the role of a foreman should be.

A foreman is one of the keys to high performance. He is the essential final link in the management level as well as being the first line supervisor in construction. He is a mediator between the crew and the company management. The dual identification makes the foreman a unique

linking element in the construction organisation. He is most effective when he is understanding and interpreting both ways. The foreman, therefore should be allowed some consideration in decentralization. One way of doing this is to have the projects short term plans developed from the integrated contribution of the lower-level supervisors. In this way, management can hold these supervisors responsible for implementing these short term plans. Also in the course of executing these plans, management should give these supervisors the directive to make decisions in such cases where the facts needed for making decision can be readily and accurately obtained.
In doing so, men feel they are noticed and that their contribution is valuable and is part of the larger scheme of things. They strive hard to implement according to schedule, feeling that failure in doing so, is failure in meeting their own demands.

Decentralization will also go a long way in solving such problems as long wait on pay day and also waiting for materials and tools. If each site could be permitted to set up its own accounts department, this will eliminate having to wait for the paymaster from head offices. The unproductive hours or the overtime payment spent in waiting for salaries will go a long way in progressing the project.

Excessive paperwork in requisitioning for material, receival of wrong item of material on delivery and also inadequate or poor quality tool were also mentioned as

factors which adversely effect productivity and the morale of the workers. They also constitute to delay and cost overrun on the sites.

Adequate lead time between the engineering design and the actual construction of project will reduce considerably the inefficiency caused by materials being delayed in arrival to the sites. Proper maintenance of tools and brushed up organisation in the warehouses or the laydown yards will also ease the problems of poor quality tools and confusion of requisitioning sheets which leads to delivery of wrong items of materials.

Theft was another aspect of material availability that received much attention. Although this problem seemed to vary in significance from site to site, it was nevertheless brought up on three different sites. Management should tighten the security processes on the sites and, instead of blaming the theft of materials on lower level work force, should devise a means of routine check that should affect every worker regardless of his status. Theft, if unchecked, can do a lot to disrupt techniques of cost checking of projects.

Overcrowded working conditions were also mentioned on sites with high density of workmen. These types of problems could be overcome if fewer men were assigned to a specific area. Also a more diligent effort of pre-planning between the various crafts should be encouraged, to minimize these disruptions.

Workers also complained of having very little feeling of company membership and they also complained about lack of feedback of performance.

Occassional representative of management-labour meeting should lessen the negative feeling of these workers. The workers could be represented by a reasonable fraction of them to discuss their needs as they arise, ways in which their work conditions could be improved and even seek their advice in making changes and improvements on the project. These workers' representatives will then communicate the outcome of the meeting to the rest and this will result in workers feeling being very important to the whole set up.

The main reason for lack of the workers physiological need satisfaction, as was gathered, is because the basic wages paid to them are inadequate. Money, which indirectly satisfies these needs, forms part of the job situation and is the hub of the whole job situation. The importance which workers attach to overtime payment suggests a basic inadequacy in their pay structure which renders the pay itself insufficient to satisfy the workers needs.

An increase in the workers basic pay would increase workers performance by positively motivating them. A rationalised system of increase scheme could satisfy more workers needs and increase their outputs. This specifically applies to labourers and craftsmen.

From the managements' point of view, the wages could be increased without a subsequent high increase in production.

Any change in wage levels, therefore, must be accompanied by a responsible disciplined attitude from unions and employers.

Training facilities with subsequent bond services to the company will ensure well trained craftsmen and will also make the labour force more stable.

As evident from the investigation result in the Belag Construction Company, Supervisors of productive and well motivated workers are generally more emotionally supportive of their employees. Management should try and treat problems having to do with workers with common sense and also try to understand them from workers point of view. In addition it should be borne in mind that this company is attached to the industrialized building systems. This fact and another that the labour force on this site was small comparatively have also contributed to the management - labour co-operation.

In as much as the inspection engineers should try to avoid large deviations from the plans, care should be exercised not to require complete compliance with specified tolerance when these degrees of accuracy in reality are near impossible to achieve. The results of such actions are typically work redone or appreciable amount of additional time spent on an activity to attain a slight increase in accuracy. Suggestions should also be entertained from foremen and their competence and working knowledge should be appreciated.

A number of the workers suggestions for ways in which management could help them do a better job might be worth

considering. Their suggestion for shortening the communication line between the designers and the men on site in order to reduce decision turnabout and also for prompt inspection on site might be of value both for reducing decision time, delay and non-conformity with the specification resulting in re-doing work.

With adequate attention given by management to these factors here, workers on construction sites will be well satisfied and highly motivated. In effect the workers will endeavour to seek their own interest and satisfaction in their jobs thereby working together as a group to achieve organisation objective, the importance of which cannot be overemphasized.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS.

Motivating construction workers has incorporated with it, management problems in the construction industry. These problems are heightened in large construction companies where the combination of size, complexity and quality requirements creates additional challenges to management.

From the results of the interviews conducted, it was gathered that workers regard job satisfaction as being different from job motivation. It can also be gathered that motivation will yield better results if applied on a satisfied worker. This shows that workers can only be motivated after they have been satisfied.
Factors which influence the satisfaction of workers on construction sites include :-

an adequate wage - which provides for the workers basic needs such as food, drink and shelter.

standard medical facility - which ensures the provision of treatment for minor injuries and illnesses on site and also responsibility of management for payment of hospital bills in cases of accidents and serious injuries.
Others include transport allowances, leave and leave allowance and also housing allowance.

While all these factors operate to satisfy the low level work force in general, the motivational processes which apply to different sets will however be treated separately.

(a) Labourers:- The major factor influencing the motivation of labourers on site is financial in nature. Workers in this category perform better where a monetary gain is sure to result. Ability is another factor influencing their motivation. If a labourer is required to do a job which is beyond his ability, he will record a low performance. Labourers are however influenced by the attitude of their supervisor. They are sensitive to very harsh and close supervision and coercion will only result in low quality or sub-standard work.

However, basic wage, which is the major factor affecting the productivity of this set of workers seems to be inadequate since it falls to satisfy the needs of these workers.

To improve the level of motivation and that of productivity of this set of workers, they should be moved to a higher basic wage, with incentive payment constituting an adequate percentage of the total wage. Monetary reward for long service and levels of skill should also be included in such a scheme, and the opinion is that the combined effects of these payments would encourage better performance and

standard workmanship from these workers.

(b) Craftsmen:- This set of workers are mostly motivated by the factors affecting the labourers. In addition, they strive for advancement and training. Conformity with schedules and appreciation of effort motivate them further to better performance on their next assignments. Most of them work hard in order to acquire favourable attentions from the managers to advance to foremans' level. In other words, they are motivated by promotion.

(c) Foremen:- In as much as adequate pay cannot be ruled out as one of the factors affecting the motivation of workers in this category, it is however not the most important factor. The analysis of interviews with this group of workers highlighted the several barriers to their motivation and productivity on construction sites. These direct problems resulted in lowered productivity, non productive paid time and negative productivity. The negative outcomes of this barriers resulted in :

1. The lack of opportunity to finish jobs.
2. Inability to get work done through workers.
3. Impracticability to perform to schedules.

All of these conditions are described by the foremen as demotivating to themselves, therefore

reducing their desire and eagerness to do a quick job on their next assignment.

Engineering lead time has a major impact on materials availability, rework, over crowding and inspection. Materials availability is dependent upon procurement and site delivery. Inadequate design lead time often creates situations in which previously completed construction work must be turn out and modified to meet the new design requirements. If design was further along and communications between the designers and the workers be improved, then less re-work would occur. Adequate field support of designers would also reduce the impact of waiting for questions to be answered.

There is no considerable effort devoted to planning. Foremen do not obtain adequate information on planning and therefore are unable to conform with it. Participation of foremen in planning work and the entertainment of suggestions from foremen as to how work should be done will go a long way to reduce the little feeling of accomplishment and the inability to get work done through the workers normally experienced by these foremen.

The pivotal role which the foremen plays in crew performance means that his motivation is of particular importance to an understanding or solution of motivating crewmen to higher level of productivity on

construction sites. The foreman has the capability of satisfying some of the non-economic needs of workmen. The foreman is however highly motivated by affiliation and recognition by management.

However, the results from this study do not agree with the scientific management thought about motivation which says that workers are dull, aimless and idle. On the contrary workers like to take initiative, are active and have low spirits when there is not enough work. The study does not agree with the fact that financial incentive is the only answer to motivation as has been pointed out. There are numerous other management input which can go a long way to ease motivation problems.

The job environment in construction today is still deficient in standard in providing satisfaction to its workers. The creation of a stimulating, productive and satisfying work environment can benefit managers and workers alike, but this can only be achieved if the problems of the employee are clearly recognised and accounted for.

There is no hard and fast process which can be applied to motivate workers in general.

Workers or their representatives should be consulted before any motivational plan is drawn up by management as by this act alone will management enlist their enthusiasm towards the project's success.

Management should also establish the wants, desires and expectations they expect to gain from such an exercise and analyse same to see if they are also perceptious of the employees.

5.2 RECOMMENDATIONS.

5.2.1 MOTIVATION.

Productivity will either be stagnant or lowered if strict motivational concepts are applied to construction workers on sites. Rather, workers motivation should be useful for understanding human behaviour and also useful to the organisation for improving productivity. To be effective, motivation processes should be renewed as conditions would warrant them and they should vary from category to category of workers because motivators have variable effectiveness with different levels.

In as much as motivation should be understood from workers point of view, it must however be directed to meet the company's expectancies. Perfect alignment between organizational expectancies and employee expectancies is virtually unattainable. In developing motivational processes, managers should strive to move both expectancies to a very close alignment. The best approach to motivating workers therefore would be expectancy alignment approach.

5.2.2 DEMOTIVATORS.

In order that such conditions that act primarily to demotivate employees be resolved, management must take care to put in the following :-

1. Eliminate rework:- by ensuring conformity with specifications and prompt supervision of constructions.

2. Decentralize decision making:- to ensure quick steps to be taken on site whenever decisions are to be made and avoid delay in going a long way to get questions answered.

3. Provide adequate field support:- of designers for prompt inspection of architectural and structural work and also for getting quick answers to questions which may arise from same.

4. Participative schedulling:- will motivate lower level supervisors to ensure that work is executed according to plans and failure to achieve this will be viewed as failure to achieve personal objective.

5. Give recognition:- for long service, working knowledge and technological know-how of long standing employees welcome suggestions from workers and implement same where they will help in achieving organisation objective.

6. View all workers as important to project.

7. Increase basic wage:- rate in order to satisfy more, workers physiological needs.

8. Improve communication and performance feedback on workers achievements.

5.2.3 SATISFIERS.

The minor dissatisfactions that usually are created due to project policy decision could be considered through a management - labour meeting. A satisfied worker would be more productive is well motivated. Therefore satisfaction forms the basis for motivation. In addition, all facilities provided for workers should be upgraded to conform with the required standard and facilities due to workers should be enjoyed throughout all levels of organisation.

5.2.4 IMPROVEMENT ON MOTIVATION.

Managers should bother to be more emotionally involved with workers. Common sense should be employed in understanding employee's needs and human relations should take a better turn on construction workers. While care is being exercised to ensure conformity with specification through supervision, it should also be borne in mind that workers usually repel very hard and close supervision. An employee-oriented leader is more likely to obtain high productivity from his crew.

Nothing is more effective in instilling a feeling of appreciation more than praise. The simple matter of a supervisor rewarding a worker by praising him can go a long way to boost his morale. New employees must be ensured to be adequately familiar with project and job environment through an induction course. A safety technique course will also help a great deal in reducing carelessness and accidents on sites.

Workers should be represented whenever a change in method which affects them will be decided. This will decrease to a great extent, the general resistance to changes exhibited by workers in construction. Workers should be represented at meetings and the representative should communicate to the others results of such meetings. Also information and feedback on workers performance can be improved through the notice boards and verbal announcements.

5.2.5 SUMMARY.

It can be summarised that results from this study are encouraging as they do suggest some avenues for increasing the morale and productivity of low level work force on construction sites. Having identified the deficiencies and inadequacy attached to satisfaction and motivation of these workers, management can use the recommendations from this study to monitor workers behaviour and project execution in order to reduce labour instability, absenteeism, frequent

failure to meet quality standard, inability to meet schedules ascalated costs and the general inefficiencies and ineffectiveness associated with the construction industry in the country.

5.2.6 EXTENSION OF STUDY.

As it has been mentioned earlier on in the course of this study, the scope is limited to the factors influencing the morale and productivity of the foremen and the lower level work force on construction sites. However, management problem as regards the human aspect of construction will be solved a step further if this study could be extended by viewing the motivation of the employees in the management cadre.

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Questionnaire

CRAFTSMAN AND LABOURER

1. What craft did you specialize in?

2. How long have you been with this company?

3. How long have you been on this project?

4. Have you received any training since you joined the company?

   (ii) When? and How?

5. Are you influenced by the attitude of your foreman?

6. What form of recognition do you receive from management?

7. What do you think management can do to secure improved performance and better co-operation from you?

8. Does management pay attention to your length of service?

   (ii) In what ways?

9. In your opinion, would you say your work is interesting and you are satisfied to be a worker with this company?

   (ii) State reasons.

Questionnaire

MANAGEMENT

1. What is your process for motivating your employees?

2. Has it worked well?

3. What changes could make it more effective?

4. Have you actually identified the motivational factors in your subordinate's job assignment that produce better performance?

5. Do your workers normally complain that their job is boring?

6. How do you show your workers the result of their performance and how it fits into the whole system?

7. Do you believe that workers are typically lazy, often dishonest, aimless and dull?

8. Do you believe that success is measured by how quickly and cheaply the work is done?

9. Do you believe that workmen should realize that he is secondary to the job?

10. Are you emotionally involved with your employees?

Questionnaire

FOREMAN

1. What craft do you supervise?

2. How many people are normally in your crew?

3. How long have you been with this company?

4. How long have you been on this project?

5. How important do you feel to the total project?

6. How interesting is your work?

7. How much feeling of accomplishment do you get from your job?

8. How much responsibility do you get from your job?

9. How much chance do you have to contribute your ideas to the work?

10. How much chance do you have to help plan the work of your crew?

11. How easy is it to get necessary questions answered?

12. How willing is management to listen to suggestions from foremen?

13. Thinking about your work as foremen on this project, what are some of the ways management could help you and your crew do a better job?

14. In your opinion what do you think could be done to improve this project?